



STATE OF CALIFORNIA

The Resources Agency

Department of Water Resources

BULLETIN No. 132-76

THE  
CALIFORNIA  
STATE WATER PROJECT  
IN 1976



JUNE 1976

CLAIRE T. DEDRICK  
*Secretary for Resources*  
The Resources Agency

EDMUND G. BROWN JR.  
*Governor*  
State of California

RONALD B. ROBIE  
*Director*  
Department of Water Resources

## CONVERSION FACTORS

### English to Metric System of Measurement

Quantity	English Unit	Multiply by*	To get metric equivalent
Length	Inches (in)	25.4	millimetres (mm)
		.0254	metres (m)
	feet (ft)	.3048	metres (m)
	miles (mi)	1.6093	kilometres (km)
Area	square inches (in <sup>2</sup> )	$6.4516 \times 10^4$	square metres (m <sup>2</sup> )
	square feet (ft <sup>2</sup> )	.092903	square metres (m <sup>2</sup> )
	acres	4046.9	square metres (m <sup>2</sup> )
		.40469	hectares (ha)
		.40469	square hectometres (hm <sup>2</sup> )
		.0040469	square kilometres (km <sup>2</sup> )
	square miles (mi <sup>2</sup> )	2.590	square kilometres (km <sup>2</sup> )
Volume	gallons (gal)	3.7854	litres (l)
		.0037854	cubic metres (m <sup>3</sup> )
	million gallons (10 <sup>6</sup> gal)	3785.4	cubic metres (m <sup>3</sup> )
	cubic feet (ft <sup>3</sup> )	.028317	cubic metres (m <sup>3</sup> )
	cubic yards (yd <sup>3</sup> )	.76455	cubic metres (m <sup>3</sup> )
	acre-feet (ac-ft)	1233.5	cubic metres (m <sup>3</sup> )
		1.2335	cubic dekametres (dm <sup>3</sup> )
		.0012335	cubic hectometres (hm <sup>3</sup> )
Volume Time (Flow)		$1.233 \times 10^{-6}$	cubic kilometres (km <sup>3</sup> )
	cubic feet per sec. (ft <sup>3</sup> /s)	28.317	litres per second (l/s)
		.028317	cubic metres per sec (m <sup>3</sup> /s)
	gallons per minute (gal/min)	.06309	litres per second (l/s)
		$6.309 \times 10^{-5}$	cubic metres per sec (m <sup>3</sup> /s)
Water Usage	million gallons per day (mgd)	.043813	cubic metres per sec (m <sup>3</sup> /s)
	acre-feet per acre	.3048	cubic metres per square metre (m <sup>3</sup> /m <sup>2</sup> )
Mass	pounds (lb)	.45359	kilograms (kg)
	tons (short, 2,000 lb)	.90718	tonne (t)
		907.18	kilograms (kg)
Power	horsepower (hp)	0.7460	kilowatts (kW)
Pressure	pounds per square inch (psi)	6894.8	pascal (Pa)
* For greater accuracy, use conversion factors in "Metric Practice Guide" (American Society for Testing and Materials, E 380-72).			

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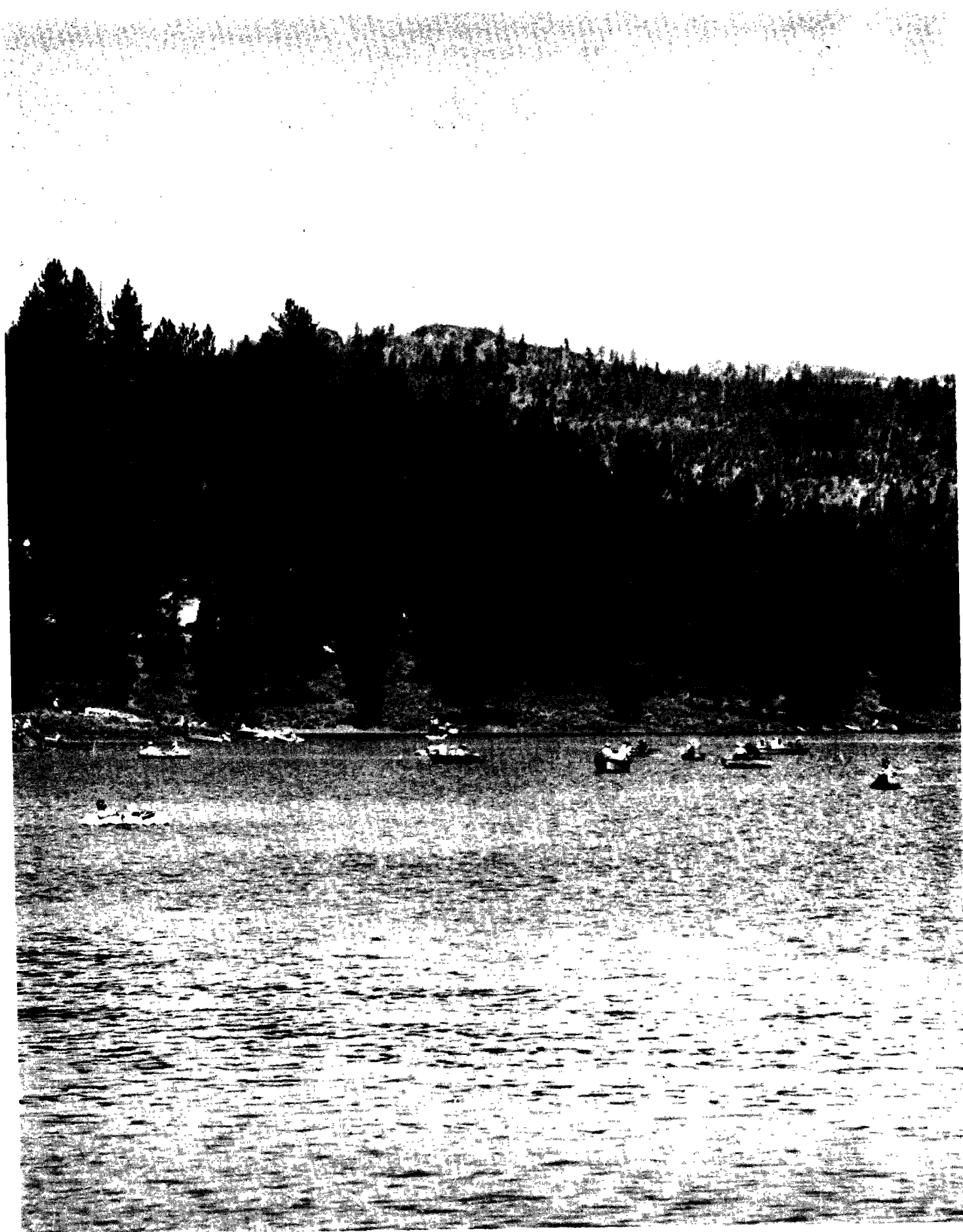


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Fishing and Boating at Frenchman Lake



## FOREWORD

In 1975, the planning and operation of the State Water Project began to be broadened to reflect the Water Management Policy adopted by the Department of Water Resources in May 1975.

The policy stresses maximum use of existing supplies, consideration of all alternative sources of supply, and emphasizes the use of "new" management techniques such as waste water reclamation and water conservation.

The policy is the cornerstone of all Department of Water Resources activities, including the planning and functional programs of the State Water Project, which are described in this year's bulletin.

In many respects, the new directions are not yet fully reflected in this bulletin. For example, the Delta Alternatives Review will not be complete until the summer of 1976, and the conjunctive ground water program is not yet a part of project operations. However, we have made a good beginning.

The need for a truly integrated water management program was highlighted by the dry water year experienced in 1975-76 (October 1, 1975, through September 30, 1976). This was the first-ever critically dry year since both the federal Central Valley Project and the State Water Project have been in operation. Effects of the dry year are still being felt and will continue to be felt throughout 1976. (As the brunt of the dry year occurred in 1976, it is not described in this bulletin, but the impact of the dry year on the State Water Project should be the major theme of next year's Bulletin No. 132.)

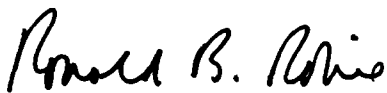
This year's report concentrates on project operations in 1975, during which water deliveries to State Water Project contractors increased 43 percent over the previous year and brought the Project to an operating level of approximately 78 percent of current yield capability. It also discusses the 1975 earthquakes in the Oroville area and the measures taken by department field personnel in activating emergency procedures and responding to the technical and public needs.

This year's bulletin uses both the international System of Units (SI), more commonly known as the metric system, and the English System. The dual referencing is one of the initial steps being taken by the Department in the program to convert to the international system of measurement.

Another new feature in this year's bulletin is the addition of several new tables in Appendix B. The new tables show annual Delta Water Charges; total annual water charges; and surplus water deliveries, costs, and charges. The publication of this data should be helpful to the water contractors and to the public.

Appendix C, the Summary of Bulletin No. 132, has been discontinued effective this year. Most of the information previously published in Appendix C will be incorporated in an expanded edition of the report, "State Water Project", to be published periodically by the Department.

Because the Delta is the collection point for all water diverted to State Water Project customers in the San Francisco Bay area, the San Joaquin Valley, and Southern California, this year we are introducing Appendix E, "Water Operations in the Sacramento-San Joaquin Delta". This year's Appendix E, which will be issued separately late this fall, will be the first in an annual series devoted to the complex water operations in the Delta.



Ronald B. Robie, Director  
Department of Water Resources  
The Resources Agency  
State of California

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## CHAPTER I. CONTINUING HISTORY OF THE PROJECT

This chapter highlights the many State Water Project programs which have been broadened to reflect the Department's new Water Management Policy. The major points of this policy are listed in the Foreword of Bulletin No. 132-75. Also included in this chapter is a status report on important water-related litigation carried on in 1975.

The status of construction activities is presented in Chapter II, and the Department's management of the Project's water and power utility is described in Chapter III.

Chapter IV describes the first quarter of the dry 1975-76 water year, water deliveries, power generation and use, and recreation. Details on the effect of the August 1, 1975, earthquake that occurred in the Oroville area are also described in this chapter.

Chapter V discusses project financing, including some significant conceptual changes concerning the application of escalation factors and financing of Additional Conservation Facilities which are introduced into this year's financial analysis.

### Actions Concerning Project Water Supply

#### ***Delta Facilities***

During the review period for the Environmental Impact Report on the Proposed Peripheral Canal Project, which was issued in August 1974, several substantial policy issues were raised, as well as important questions about technical factors and assumptions. (Similar questions were raised at a public hearing held by the Senate Committee on Natural Resources and Wildlife in December 1974.)

In order to address the issues and questions brought out through these and other public forms, the Department of Water Resources established a Delta Alternatives Review Program to reconsider the need and timing for a Delta transfer facility for the State Water Project and the federal Central Valley Project. The Delta Alternatives Review is a dual-purpose program: to provide Delta protection and to provide adequate water supplies for California. Both of these commitments have always been a part of the State Water Project.

The review process includes an examination of various alternatives within the Delta to accomplish the necessary Delta protection and transfer of water

from the Sacramento River to the export pumping plant, as well as other alternatives, such as curtailed diversions during certain problem periods; conjunctive use of surface and ground water storage; conservation; and other sources of water, such as waste water reclamation. The review also includes the examination of water demand schedules to define the time period for future actions.

The review process consists of three phases, all of which have or will be followed by full public review:

1. Establish objectives and alternatives to be studied.
2. Preliminary evaluations and narrowing alternatives (including identification of legal, technological, and timing constraints).
3. Detailed analysis of the remaining alternatives and selection of a program of action.

When the process is completed, the Department should be able to recommend a course of action on Delta Facilities. The first phase of the review was completed on schedule in 1975, and the entire review, including a recommendation, is scheduled for completion during the summer of 1976.

## ***Transfer of Water Entitlements***

In the spring of 1975, negotiations involving the sale or transfer of entitlement water were taking place between some long-term contractors and other agencies. One such negotiation culminated in an agreement which was submitted to the Department for approval. After careful consideration, the Department indicated it would not approve the agreement nor would it approve any similar agreements at that time.

However, the Department did issue Water Service Contractors Council Memo No. 970 (dated June 10, 1975) requesting each water contractor to provide information concerning its interest in changing the amount of its entitlement water. One objective was to reevaluate contractor build-up and to incorporate water conservation efforts into the State Water Project.

The results of the poll were essentially:

None of the 31 contractors wished to eliminate its maximum annual entitlements.

Certain contractors, primarily located in Southern California, wanted to reduce their annual entitlements and to extend the build-up so that their maximum annual entitlements would not be reached until well after 1990.

Certain other contractors, primarily located in the San Joaquin Valley, desired their maximum annual entitlements to be increased with build-ups generally reaching the maximum by 1990. Some of these contractors would be satisfied with temporary increases of annual entitlements.

A task force was established to review the Project's water management program to indicate what actions should be taken particularly as to transfer of entitlement water. The specific objectives of the management review are:

1. Determine the most feasible means to minimize the apparent mismatch of entitlements in relation to needs while maintaining the financial integrity of the State Water Project.
2. Identify any other areas of project water management which need a more definitive expression of the Department's guiding policies and administrative procedures.
3. Chart a definitive course of action for the Department's future project water management.

The task force review is scheduled to be completed in July 1976.

## ***Conjunctive Use of Surface and Ground Water Supplies***

In 1965, the late Assemblyman Carley V. Porter stated to a Ground Water Resources Conference in Los Angeles that:

"A tremendous opportunity is available for Southern California during the next few decades to store water from the Feather River Project in underground basins of Southern California . . ."

The Department is in agreement with Mr. Porter's view and has studied the use of surface and ground waters to supplement one another. Such use is frequently termed "conjunctive use". When this term is used in the Department, it means an orderly plan considering all available sources of water, timing requirements, and other constraints to maximize the yield capability of both sources. It does not mean unplanned or incidental use from the two sources only as the simplest or most convenient expedient.

The interest in conjunctive use has intensified since sites for surface water developments are no longer as plentiful as they once were and because construction costs for such developments have increased considerably. Consequently, the Department is examining conjunctive use as a means of developing the required project yield needed in addition to the yield provided by the existing conservation facilities.

Much planning work has been done in this area over the intervening bridge of years and a preliminary feasibility report covering the recharge of ground water basins in Southern California with water from the Project was completed in 1974 (see page 6, Bulletin 132-74).

The implementation phase of this work began in 1975, when the San Fernando Basin was selected as a prototype to examine the possibility of operating ground water basins conjunctively with the State Water Project. The basin was selected because:

- It has more than 395 000 cubic dekametres (320,000 acre-feet) of storage capacity available for the prototype.
- The basin appears to be manageable in that it has been adjudicated and is controlled primarily by the Los Angeles Department of Water and Power. Additionally, the City has developed a computer model for the basin as a useful management tool.
- There is available capacity in the West Branch to deliver water to the ground water basin.
- Metropolitan Water District can conveniently take project water from its turnout at Castaic Lake and deliver it to the spreading grounds.

Two methods are being considered for the operation of the prototype. Both methods provide for 395 000 cubic dekametres (320,000 acre-feet) of state project water to be stored in the San Fernando Ground Water Basin in the period 1976 through 1980. However, one method provides for direct recharge of 315 000 cubic dekametres (255,000 acre-feet) and surface delivery or 80 000 cubic dekametres (65,000

acre-feet) in exchange for an equal amount of local water already in storage. The other method provides for direct recharge of 135 000 cubic dekametres (110,000 acre-feet) and an exchange of 260 000 cubic dekametres (210,000 acre-feet).

Although there are many details to resolve, it is envisioned that this facility will be operated as a conservation facility similar to the San Luis Reservoir.

### **Delta Fish Test**

In 1975 the Department of Fish and Game requested the Department and the U. S. Bureau of Reclamation to curtail export pumping in the Delta to a pre-State Water Project level so a test could be performed to determine if the survival of striped bass would return to historic levels. This test would provide basic data necessary for formulating project activities in the Delta.

The Department and the Bureau agreed to the request and the test was initiated on May 15 and continued through July 31. During the test period, the Department of Fish and Game sampled young fish in the Delta, Suisun Bay, and the Sacramento and San Joaquin Rivers.

The sampling indicated that most of the population of young fish were in the lower Sacramento and San Joaquin Rivers; however, the total abundance of young fish in the rivers, Delta, and Suisun Bay was less than the Department of Fish and Game expected with low exports.

The Department of Fish and Game concluded that the shift of fish population to the Rivers as shown by the test supports its hypothesis that export rates are a major factor controlling striped bass survival in the Delta. However, as a result of the lower abundance than expected, the Department of Fish and Game

indicated that the test did not produce definitive conclusions regarding abundance and exports. It believes that the atypical spring flow in 1975 was one of the contributing factors to the results received. Scheduling of another test when spring flows are typical of those recorded historically is presently under consideration.

### **Financing of Distribution Works**

Each contracting agency, in addition to paying its allocated share of project costs for the water it has contracted to receive, must finance the construction of any distribution facilities which might be required in order to utilize the project water after taking delivery of it at canalside. It is currently estimated that the 31 agencies which have contracted for the minimum project yield will ultimately spend a total of \$2.3 billion for such facilities. Expenditures to date are estimated to total \$1.3 billion.

Under a 1968 enactment the Legislature made \$8 million available to assist designated agencies in financing works needed to distribute project water. Two forms of assistance were made available.

- Loan commitments to help guarantee payment of service on general obligation bonds sold by the agency to finance construction of works needed to distribute project water.
- Construction loans needed to supplement funds needed for construction of works needed to distribute project water.

As of December 31, 1975, seven construction loans totaling \$7,500,000 had been made to five agencies, and the applications of a sixth agency was under consideration (see chart below).

Applicants (All Member Units of Kern County Water Agency)	Construction Loan Disbursements	Construction Loan Application Under Consideration
Berrenda Mesa Water District	\$1,500,000	
	100,000	
Cawelo Water District	1,800,000	
Lost Hills Water District		\$500,000
Rosedale-Rio Bravo Water Storage District	550,000	
Semitropic Water Storage District:		
Buttonwillow Improvement District	2,450,000	
Pond Poso Improvement District	768,000	
	332,000	
TOTAL	\$7,500,000	\$500,000

### ***Extension of California Aqueduct***

In 1975, Coachella Valley County Water District, Desert Water Agency, Mojave Water Agency, San Bernardino Valley Municipal Water District, and San Geronimo Pass Water Agency asked that the Department conduct a study regarding extension of the California Aqueduct to the Upper Coachella Valley. (The contract covering this study was executed early in 1976.) These contractors agreed to pay the Department up to \$100,000 for the study, which will cover specified subjects including alignment; costs; timing; staging and the effect on project water deliveries; water contractor repayment, power requirements, and financing. At present, Coachella Valley County Water District and Desert Water Agency obtain Col-

orado River water through an exchange agreement with The Metropolitan Water District of Southern California.

The two routes to be studied consist of one beginning at the Devil Canyon Afterbay and proceeding easterly through San Bernardino, Yucaipa, Beaumont, and Banning to a terminus point near Garnet; the other beginning at the Hesperia turnout and proceeding easterly through Lucerne and Johnson Valleys and southerly through Yucca and Morongo Valleys to the common terminus near Garnet. The objective is to determine the feasibility of providing transportation of project water through a project facility to an appropriate location within the water contractors' boundaries as has been done for most other long-term project water contractors.

## **Actions Concerning Project Facilities**

### ***Wheeling of Central Valley Project Water***

*Cross Valley Canal.* Contracts for wheeling federal water through portions of the California Aqueduct for delivery to Kern County's Cross Valley Canal were executed in 1975 between the State, the U. S. Bureau of Reclamation, and five San Joaquin Valley agencies<sup>1</sup>. A sixth contract was executed with Rag Gulch Water District early in 1976, and several additional contracts are under consideration. The first wheeling and delivery took place in January 1976.

<sup>1</sup> (Pixley Irrigation District, Lower Tule Irrigation District, Ducor Irrigation District, Tulare County, and Fresno County.)

The contracts provide that:

- A maximum of 102 015 cubic dekametres (82,704 acre-feet) will be wheeled for the above-mentioned six agencies. (If all the proposed contracts are executed, the State will wheel up to 158 258 cubic dekametres (128,300 acre-feet) a year to the Cross Valley Canal.)

The use of state facilities for wheeling federal water will be limited to times when they are not required for State Water Project operations.

The term of the contract is 1995.

- Payment will be at the equivalent unit rate for capital and minimum costs of the aqueduct reaches used for wheeling.
- No additional costs shall be incurred by state water contractors.
- The Bureau of Reclamation will provide the water and power for pumping the federal water at the Delta Pumping Plant.
- The State will wheel the water between the Delta and O'Neill Forebay and between Kettleman City and the turnout to Kern County's Cross Valley Canal.

In addition, the contracts, letter agreement, and exchange of letters between the U. S. Bureau of Reclamation and the Department of Water Resources provide that the Department, in wheeling Cross Valley water from the Delta, will comply with all state and federal water quality standards applicable to the Department. Thus, the Department will not pump Cross Valley water from the Delta when the Delta water quality standards are not being met. Compliance with such standards requires the cooperation and participation of the Bureau of Reclamation in releasing into the Delta its share of the water required. The extent of the Bureau's participation is stated in the draft of the coordinated operating agreement between the Department and the Bureau under which operations are conducted pursuant to annual letters of agreement. During any period when the Bureau is not releasing its share of the Delta outflow, the Department is not obligated to wheel Cross Valley water.

*Mid-Valley Canal.* The Department of Water Resources is participating in a joint study with the U. S. Bureau of Reclamation to develop a plan for a proposed Mid-Valley Canal. The Canal would be a feature of the Central Valley Project and would be designed, constructed, and operated by the Bureau. Existing facilities would be used to transport federal water from the Delta through the California Aqueduct to the Canal, which would then convey water across the Valley to serve parts of Merced, Madera, Fresno, Tulare, Kings, and Kern Counties.

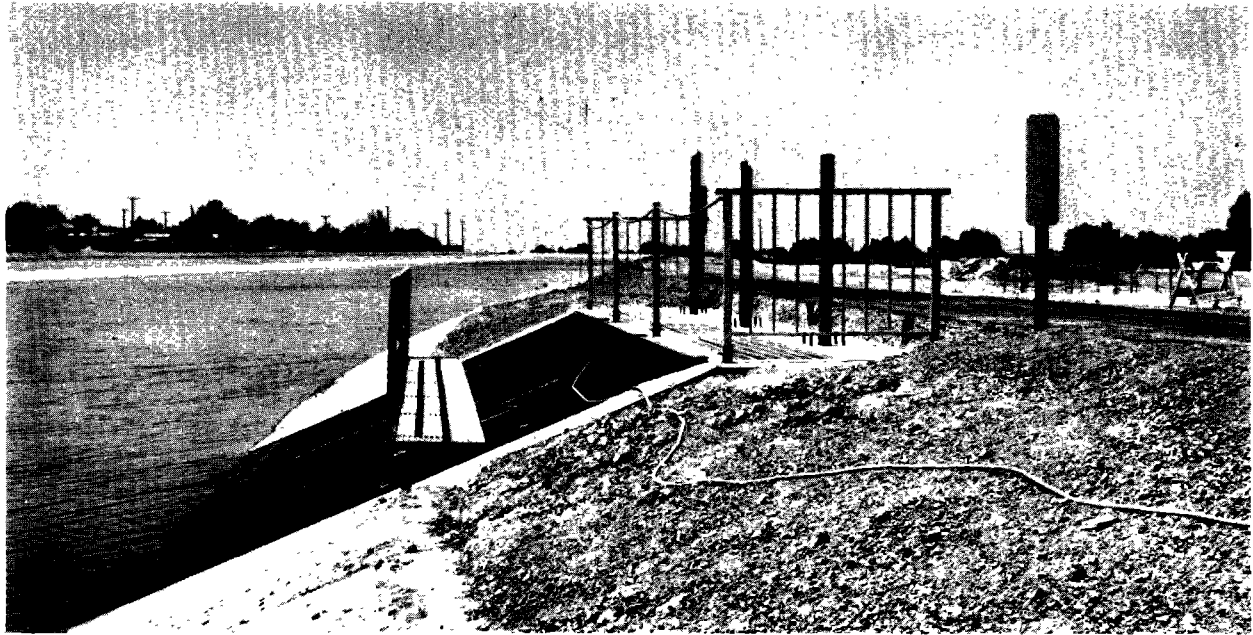
Assuming that an acceptable project can be formulated, the Department's role, beyond the planning stage, continues to be limited to providing wheeling service through the California Aqueduct.



*San Felipe Project.* In the spring of 1975, the Department of Water Resources held public hearings on the San Felipe Division of the Central Valley Project. Based on those hearings, the Department announced it was withholding support for the project until certain conditions could be agreed upon. The basic issues involved water quality, waste water reclamation and water conservation, and the need for a local election.

The Department and the Santa Clara Valley Water District reached a four-point agreement in September

1975, but the water quality provision is not satisfactory unless the Department receives a commitment by the Bureau of Reclamation to wheel water through the California Aqueduct. (Such an agreement would be similar to that reached for the Cross Valley Canal and would be conditioned on the Bureau's furnishing its share of water to meet state and federal water quality standards in the Delta.) It is hoped that the Bureau and the Department will reach an agreement in 1976.



Greater Bakersfield Turnout — Intake to Cross Valley Canal



Sugar Beets Under Irrigation In San Joaquin Valley

## Long-Range Power Program

In 1975, the Department accelerated its efforts to assure adequate sources of power for the Project in the future, with particular emphasis on project needs in 1983, when some of the present power contracts will expire. (Chapter III contains a more detailed description of these activities. However, they are highlighted here for general interest.)

The main thrust of the Department's long-range power program is to consider a wide range of alternative sources of power. Among the avenues being explored are:

Purchased power from the California Suppliers (PG&E, SCE, SDG&E, LADWP).

- Additional project recovery plants — Pyramid, Cottonwood, San Luis Obispo.
- Withdrawal of Hyatt-Thermalito power for project use.
- Bonneville Power Administration surplus energy.
- Nonproject hydroelectric power potential in California.
- Power from the Pacific Northwest.
- Thermal plants in California (nuclear, coal, geothermal, etc.).

- Coal-fired plants in neighboring states.
- Wind, solar, tidal, etc.

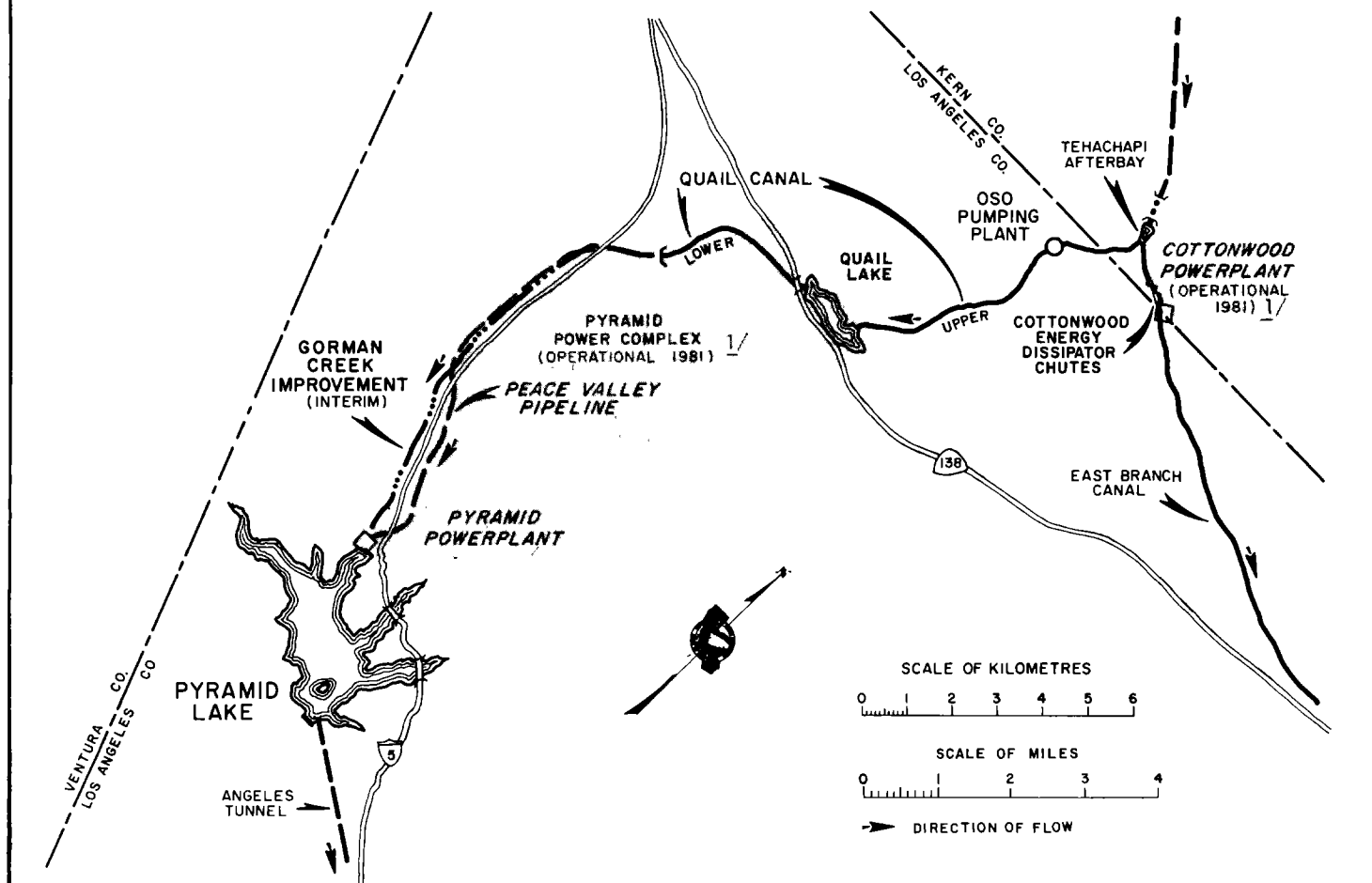
In addition to cooperating or participating in power projects, the Department is very strongly looking at the possibility of developing its own facilities.

## Future Southern California Recovery Plants

The locations of the proposed power plants, which have the potential to generate 1.1 billion kilowatt-hours of energy, are shown in Figure 1. Design activities for the Pyramid Power Complex (see page 2 of Bulletin 132-74) continued in 1975 with the initial operation of Pyramid Powerplant scheduled for 1981. However, at the recent West Branch Environmental Impact Report hearings in Los Angeles, The Metropolitan Water District of Southern California indicated it is considering changing its scheduled water deliveries through the West Branch, which makes the 1981 date subject to revision. The Department is now studying the feasibility of staging the construction of the Pyramid Power Complex.

Initial operation of the Cottonwood Powerplant is now scheduled for 1981, two years earlier than was reported in last year's bulletin. However, this date is also under review.

**Figur 1: FUTURE SOUTHERN CALIFORNIA RECOVERY PLANTS**



## Figur 2: AQUEDUCT RECREATION DEVELOPMENTS

### Acti ns C ncerning Project Recreation and Fish and Wildlife Enhancement

Recreation use in 1975 on the State Water Project increased approximately 3 percent over 1974. In January, an additional 177 kilometres (110 miles) of the California Aqueduct were opened to walk-in fishing. The first two fishing access sites south of the Tehachapi Mountains along the California Aqueduct were opened in the spring, and later in the year another site was opened in the San Joaquin Valley. Figure 2 indicates the status of aqueduct recreation developments at the end of 1975.

### Fishing Access Site Program

Under legislation enacted in 1968, the Wildlife Conservation Board has the responsibility for planning and developing a fishing access program on aqueducts of the Project (see page 2, Bulletin 132-69). In 1969, the Board and the Department embarked on a program of development at certain sites along the California Aqueduct under which the Department agreed to:

Permit use of some existing roads.

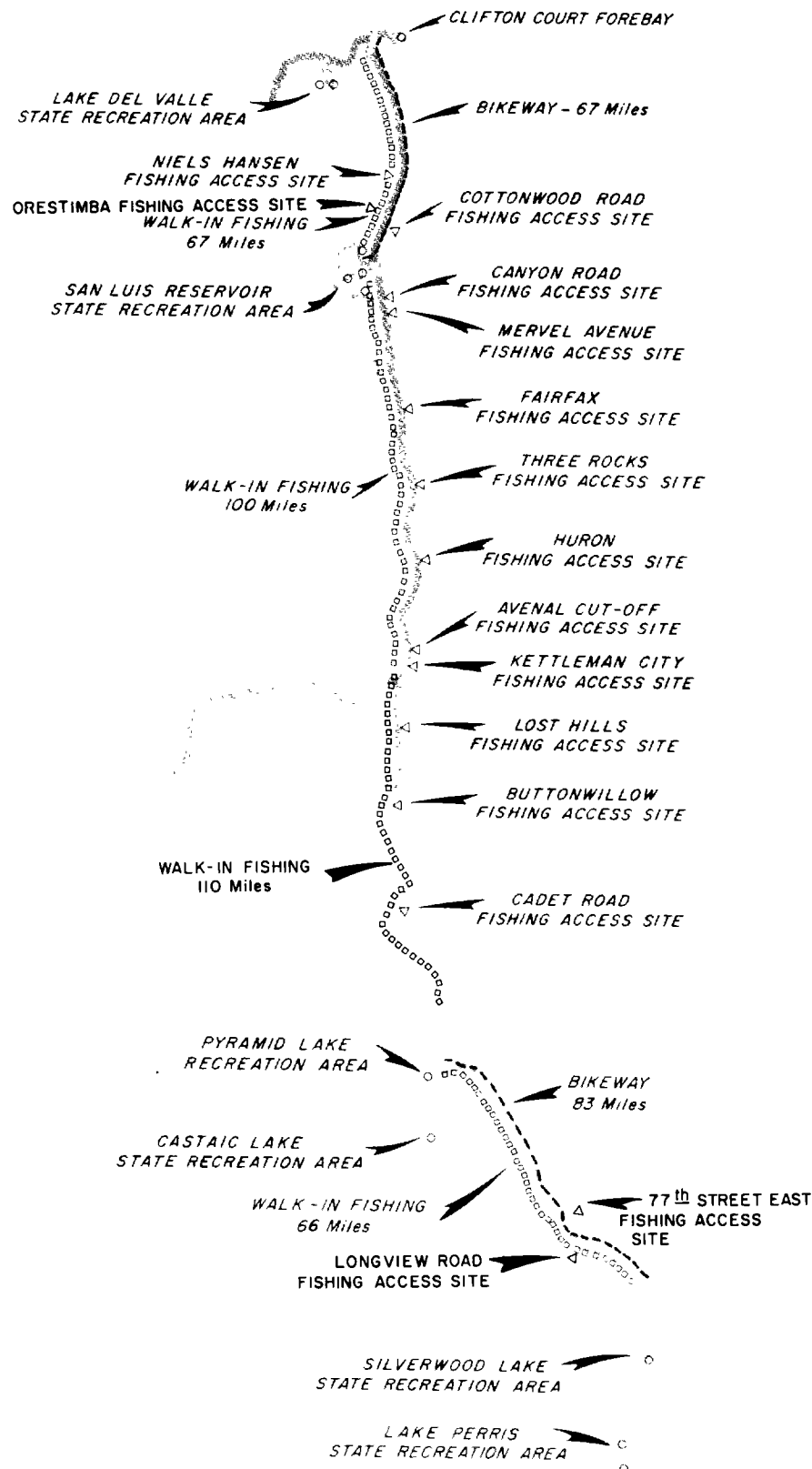
Furnish and install necessary safety devices prior to public use.

Provide necessary access to land upon which to develop the sites.

In addition, the Board requires that a fishery be established prior to development of a site, site operation and maintenance be provided by local government, and site facilities should be adequate but not elaborate.

During 1975, the addition of three new fishing access sites brought the total number to 15 on the California Aqueduct. The new sites are the Orestimba Fishing Access Site located in Stanislaus County a short distance off Interstate 5, approximately eight miles northwest of the community of Gustine; the 77th Street East Fishing Access Site in Los Angeles County, a short distance from Highway 138 near the town of Littlerock; and the Longview Road Fishing Access Site, also in Los Angeles County approximately two miles from the town of Pearblossom.

Considerable use has been made of the sites in the San Joaquin Valley. The Aqueduct is the largest flowing body of water in the semiarid valley and substantial fishery has become established. All sites are open and free to the public and have been well used.



## Litigation

The following are summaries of significant litigation which involved the State Water Project in 1975:

*Zurn Engineering, Inc., (Pascal and Ludwig) v. State Department of Water Resources*, Superior Court Los Angeles County No. 978331. The contractor for the construction of Grizzly Valley Dam (Lake Davis) contends the Department still owes approximately \$1.4 million for work done because of changes in the work, forced acceleration, and added quantities of excavation and fill. Judgment was entered on February 10, 1976 for plaintiff awarding it a total of \$896,000 plus interest. The Department has appealed.

*McNamara-Fuller v. State Department of Water Resources*, Superior Court, San Francisco No. 595815. This suit, filed in September 1968, arose from the initial construction contract for the Oroville Powerplant. The plaintiff is seeking \$15,000,000 on theories of breach of contract, changed conditions, breach of warranty, and misrepresentation as to subsurface conditions.

On August 7, 1975, the trial judge filed his final judgment awarding plaintiff \$11,732,000 plus interest. The Department has appealed. The Department's opening brief is to be filed by July 1, 1976.

*State Department of Water Resources v. Moloney*, Sacramento County Superior Court, involves the purchase of transformers for the Oroville Powerplant. Three of the transformers failed after a short period of use, and upon examination it was found that they did not meet original contract specifications. All six transformers have now been repaired or rebuilt and the State is seeking to recover the costs of approximately \$2,000,000.

On September 30, 1975 Central Moloney Inc. filed a cross-complaint against the Department for \$255,886 for repairs made on two of the transformers.

Pretrial discovery is in progress but a trial date has not yet been set.

*San Bernardino Valley Municipal Water District v. Department of Water Resources and The Metropolitan Water District of Southern California*, Sacramento County Superior Court No. 22837 filed in 1972. The plaintiff water supply contractor alleges the Department breached a provision of its water supply contract with plaintiff, which requires all of the Department's long-term water supply contracts to be substantially uniform as to their basic provisions. Plaintiff alleged its contract was breached when the Department executed Amendment No. 12 to the water supply contract with The Metropolitan Water District of Southern California, prohibiting the Department from serving water to any other agency within the Metropolitan Water District's service area.

The Municipal Water District of Orange County successfully intervened in the case and a motion to disallow the intervention was denied.

On August 7, 1975, the court granted a judgment on the pleadings to the defendants. The Plaintiff has appealed.

*Bowker v. Morton*, U. S. District Court, San Francisco, No. C-701274-OJC, filed in 1970. This is a class action brought against both the State and Federal Governments. Among other things, plaintiffs seek an injunction and declaratory judgment requiring application of the federal reclamation laws, including the 160-acre limitation to land within the state service areas of the State Water Project. The State's position is that the federal law has no application to land receiving water solely from the State.

The plaintiffs filed an amended complaint in February 1974 after the Court ordered counsel to show cause why the case should not be dismissed for lack of prosecution. The State filed an answer to the amended complaint in April 1974. On April 24, 1974, the Court dismissed without prejudice to refile, part of the cause of action relating to the National Environmental Policy Act of 1969.

On February 21, 1975, Federal District Judge Carter granted plaintiffs' motion for certification for immediate appeal to the Ninth Circuit Court of Appeals of the Court's order of October 1974 which dismissed plaintiffs' claim for relief insofar as it charged that the San Luis Act requires, as a matter of law, that the State Service Areas are subject to the 160-acre limitation. The Ninth Circuit accepted the appeal on May 2. Briefs have been filed but the scheduled presentation of oral arguments on March 10, 1976, has been postponed indefinitely by the Court.

*Sierra Club v. Morton*, U. S. District Court, San Francisco, filed in 1971. The plaintiffs seek to enjoin federal and state defendants, including the Director of the Department of Water Resources, from constructing or continuing construction or operation of the Delta Pumping Plant, the Peripheral Canal, the San Luis Drain, the East Side Canal, and the Tracy Pumping Plant because of an alleged failure to meet environmental requirements. The principal statutes involved are the National Environmental Policy Act of 1969, the California Environmental Quality Act of 1970, and the Rivers and Harbors Act of 1899.

On July 28, 1975, Judge Charles B. Renfrew issued a Memorandum of Opinion which stated that the Peripheral Canal would and the Delta and Tracy Pumping Plants did affect the "navigable capacity" of navigable waters in the Delta. He, therefore, ordered the state and federal defendants to obtain permits for these facilities from the U. S. Corps of Engineers. The Corps must consider environmental impact statements before issuing any permits for these facilities and may, through its permit authority, impose restrictions on the operation of the facilities.

No injunction has been issued. All parties in the case met with the judge and are continuing to meet with each other to establish schedules for compliance with the Corps' permit requirements and to resolve technical issues with regard to a final order by the Court.

Although the State and all other defendants have filed appeals, the Department has also begun compli-



ance by filing for two permits to divert water through the Delta Pumping Plant. One application is for the installation of four new pumps to be used for pumping with cheaper off-peak energy and not for expanded diversions. The other application is for full capacity diversion including use of the four additional pumps. These applications would be dropped if the trial court is reversed, but in the interim the Department will help the Corps prepare an EIS for the latter permit in case the appeal fails. The application for the four pumps would be processed only if the proposal will have no significant effect on the environment and thus not require an EIS.

*Litigation Concerning State Water Resources Control Board Jurisdiction Over the Central Valley Project.* The issue of the State Water Resources Control Board's (SWRCB) jurisdiction over operation of the Central Valley Project (CVP) by the Federal Government is involved in five cases pending before the U. S. District Court in Sacramento. They are:

- a. *Kern County Water Agency v. SWRCB* and *Central Valley East Side Project Association v. SWRCB* (to set aside Delta Water Rights Decision 1379);
- b. *San Joaquin County Flood Control and Water Conservation District v. SWRCB* (to set aside Lower American River Water Rights Decision 1400);
- c. *People ex rel. SWRCB v. Morton* (to compel CVP compliance with SWRCB water rights permits);
- d. *USA v. State of California* (to declare that U.S. Bureau of Reclamation is not subject to SWRCB water rights regulation and to set aside portions of New Melones Decision 1422).

The issue is being litigated in *USA v. California* while the other cases are held in abeyance. A hearing on the SWRCB's motion for summary judgment was held November 26, 1974.

On October 9, 1975, Judge MacBride held that the United States is not required to comply with the conditions in Decision 1422. The Judge ruled that the United States can appropriate unappropriated water necessary for use in any federal reclamation project in California and need apply to the State Water Resources Control Board for a determination of the availability of unappropriated water as a matter of comity. The Judge further held that the State must grant such applications if unappropriated waters are available and that Section 8 of the Reclamation Act of 1902 does not allow state agencies to impose terms or conditions on such applications. The State has appealed the decision to the Ninth Circuit Court of Appeals.

Although the Department is not a party, it filed a friend of the court brief on the appeal in support of the Board. The decision could set a precedent which would leave the Department without the Bureau of Reclamation's contribution to maintaining water quality in the Sacramento-San Joaquin Delta. With-

out that help, the ability of the Department to meet its water contacts could be impaired.

*Environmental Defense Fund v. Morton*, U. S. District Court, Sacramento, filed in 1971. This lawsuit seeks to enjoin the Bureau of Reclamation for executing the CVP-SWP coordination agreement until an Environmental Impact Statement (EIS) is prepared pursuant to the National Environmental Policy Act of 1969.

The United States has stipulated that it will prepare an Environmental Impact Statement (EIS) and the case is off calendar until the EIS is completed.

*State Department of Water Resources v. Garden Highway Mutual Water Company*, Sutter County Superior Court No. 21359, filed December 17, 1975.

In this action the Department requests the Court to determine the rights of Defendant Garden Highway Mutual Water Company to divert water from the Feather River. The Defendant Company holds lands along and near the Feather between Oroville and the junction of the Feather River and the Sacramento River. The Company has appropriative rights to divert up to 62.7 cubic feet per second from the river and also has some riparian lands.

The Department releases stored water from the Oroville-Thermalito facilities which flows down the river to satisfy uses along the river and in the Delta and also for diversion into the California Aqueduct for delivery to state water contractors.

The Company claims the right to divert more water than the Department believes that the Company is entitled to divert pursuant to its rights. The Department has negotiated agreements with almost all of the water users along the Feather River below Oroville but has not been able to reach agreement with Defendant Company.

*Seepage Suits, Sacramento and Feather Rivers.* Several units were filed during 1975 and early 1976 against the State and the United States in both the state and federal courts by more than 25 landowners adjacent to the Sacramento and Feather Rivers for damages alleged to have been caused by high water seepage in March and April of 1974 allegedly resulting from the coordinated operation of the federal and state water projects. The plaintiffs allege damages in excess of \$30,000,000.

*Earthquake Claims.* The Oroville earthquake which occurred on August 1, 1975, stimulated several large-dollar-amount claims against the State before the Board of Control. These claims were denied and none have resulted in any suits being filed as of the time this bulletin went to press.

*Friends of the Earth v. Brinegar (Coleman)*, U. S. District Court, San Francisco, No. C-73-2184 RHS filed in 1973.

In 1968, the California Departments of Water Resources and Transportation signed an agreement to coordinate the construction of the Peripheral Canal

and the Interstate 5 highway by using material excavated from the Peripheral Canal alignment as highway fill material. In November 1973, Friends of the Earth, Save the Delta Association, and others, sued the U. S. Secretary of Transportation in the Federal District Court in Washington, D. C., to enjoin the construction of Interstate 5 between Sacramento and Stockton, alleging that construction under this agreement would allow the Department of Transportation to start construction of the Peripheral Canal without an Environmental Impact Statement on the Canal. The California Department of Transportation intervened in the suit in April 1974 after the case was moved from Washington, D. C., to San Francisco.

In May 1974, the Federal District Court in San Francisco granted the defendants' motion for summary judgment on the basis that the Environmental Impact Statement was adequate and that the connection between the Peripheral Canal and the Interstate 5 freeway was too remote to require the highway EIS to cover the canal project. The plaintiffs appealed to the Ninth Circuit Court of Appeals and a hearing was set for early 1975. On March 11, 1975, the Court of Appeals affirmed the District Court's summary judgment.

Since no appeal was filed within the statutory period for appeals, the Ninth Circuit's opinion is final.

*Proceedings Before the Public Utilities Commission Regarding State Water Project Suppliers Contract*, (Case No. 9886 and Application No. 54946). The Department's contract for the purchase of power from California's major utilities ("Suppliers Contract") was one of the subjects addressed in two PUC proceedings instituted in 1975. The subject arose when the utilities requested relief from the PUC's current fuel cost adjustment procedures as applied to the Suppliers Contract. One of the alternatives suggested was that the rates paid by the Department for power under the contract be increased. The Department appeared in both proceedings to oppose this alternative. The PUC, in its decision in Case No. 9886, did not make any alteration in the Suppliers Contract rates, but rather decided to revise its fuel cost adjustment procedures to take into account the power which is being sold by the Department to the utilities pursuant to two other contracts. This should provide the utilities with the relief they were seeking, while at the same time not have any adverse effect on the Department. This decision is expected to be applied in the Application 54946 proceeding.

*State of California v. Oroville-Wyandotte Irrigation District*, Federal Court of Appeals, Ninth Circuit, Civil S-74-5975JM. Concurrently with Department of Water Resources construction of Oroville Dam, OWID constructed its Miners Ranch Canal along the perim-

eter of the reservoir. In 1966, DWR filed an action in federal court seeking declaratory and injunctive relief under its FPC license for the Oroville project. The Department of Water Resources sought a declaration that it had no duty to preserve or protect the canal.

Oroville-Wyandotte Irrigation District then filed an action before the California Public Utilities Commission contending that California Water Code Sections 11590, et seq., required the Department to preserve or protect the Canal.

A panel of consultants convened in the federal action concluded that a section of the canal should be replaced by a tunnel and that the remaining portion of the canal should be upgraded to prevent damage from erosion and slides which might be caused by Oroville Reservoir. The California Public Utilities Commission then ruled that the Department should be responsible for the cost of the tunnel and improvements.

The Department's attempts to obtain relief from the Commission ruling in the California courts were unsuccessful. The Department then sought relief in federal court on the basis that the Commission ruling indicated that Oroville-Wyandotte Irrigation District should be responsible for the improvements to its facility. The District Court ruled against the Department of Water Resources and that ruling was affirmed by the Ninth Circuit Court of Appeals on June 3, 1976.

Alternatives to construction of a tunnel and extensive improvement of the canal are being reviewed by the Department's staff.

*The City of Los Angeles v. City of San Fernando*. On May 12, 1975, the California Supreme Court decided a landmark case involving rights to ground water (14 Cal. 3d 199 (1975)). The Court upheld Los Angeles' claims to (1) *native* ground water, based on a pueblo right, and (2) ground water derived from *imported* water. A pueblo right is a right ascribed to Spanish and Mexican law. Of greater significance statewide is the Court's holding that Los Angeles has a right to recapture the foreign waters that it and its customers have imported and placed, directly and indirectly, in an underground basin.

The Court has removed the legal uncertainties surrounding the authority of importing agencies to conjunctively use their water supplies and to plan recharge programs. The importer, under this case, may depend on obtaining a right to the water from the imported supply that percolates into a basin after application to the land. The importer, including the State if it retains ownership of the water, may also provide for a recharge program and be sure of retaining its right to recapture the amount of water that it places in the basin.

## CHAPTER II. PROJECT CONSTRUCTION

The construction program on the State Water Project during 1975 consisted primarily of Phase II construction on the Mojave and Santa Ana Divisions of the California Aqueduct and modifications to existing project facilities. *Construction divisions are delineated on Figure 3.*

### Plans and Specifications

In 1975, the Department completed plans and specifications for 32 construction and procurement contracts, 30 of which were awarded by the year's end. Some of the more significant plans and specifications completed were those for:

- Replacement Trashracks and Trashrack Stabilizers for Edward Hyatt (Oroville) Powerplant Penstock Intake

- Delta Pumping Plant Air Conditioning

- Acoustic Flowmeters along the California Aqueduct

- California Aqueduct Facilities Modification Contracts Nos. 3 and 4

- Wind Gap Pumping Plant Valve Gallery Modifications

- South San Joaquin O&M Center, Completion—Phase I

- San Bernardino Tunnel Intake Structure, Modification of Hydraulic Piping

- Perris Dam Seepage Collection Facilities

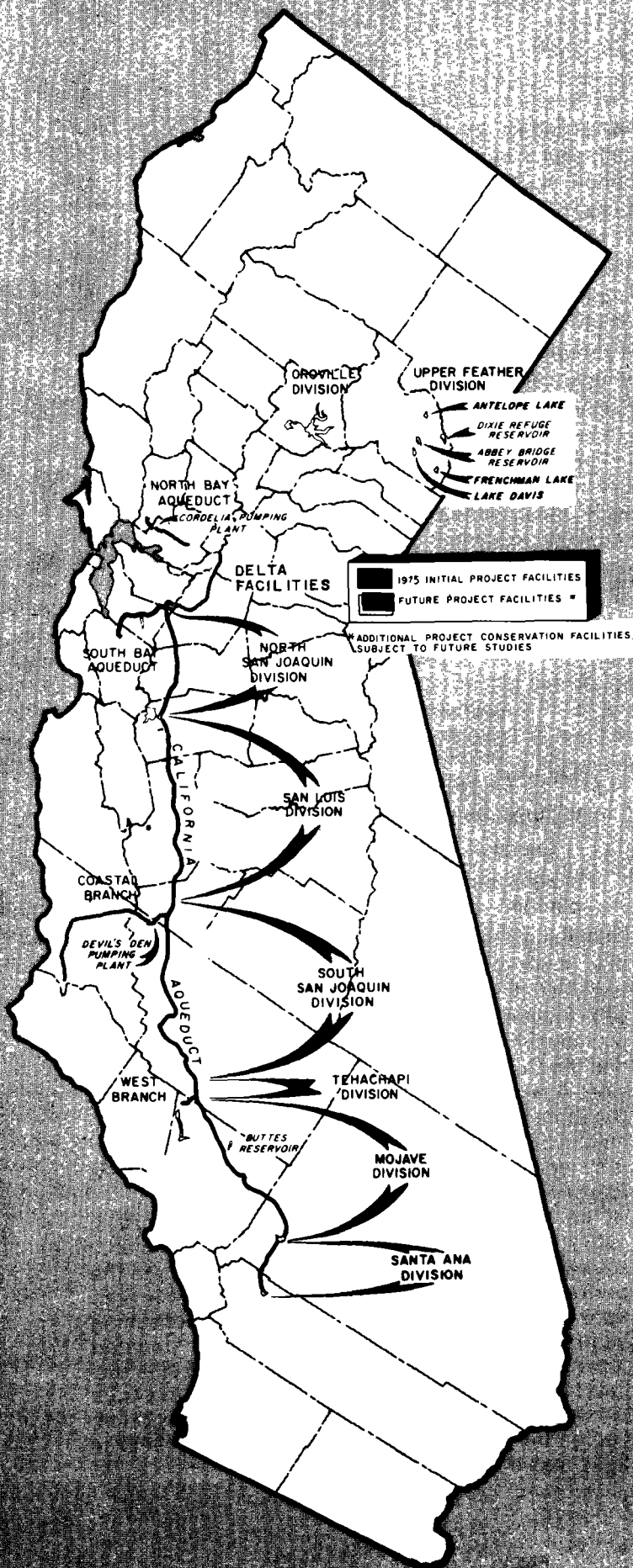
- Castaic Lake Forest Service Road 6N13

- Southern California O&M Center, Completion

Although activities concerned with the preparation of plans and specifications were reduced from last year, design activities were not curtailed. Major effort was directed toward the Pyramid Power Complex on the West Branch of the California Aqueduct and the Cottonwood Powerplant in the Mojave Division. A review of alternatives of physical facilities in the Delta was also performed as a part of the Department's Study of Alternative Courses of Action, which is scheduled to result in a recommendation on Delta Facilities to the Governor in July 1976.

The moderately strong earthquake on August 1, 1975, in the vicinity of Oroville Dam, prompted a considerable amount of review activities to analyze the performance of project facilities in the Oroville area during and after the quake. A special consulting board, appointed soon after the quake, updated previously established seismic criteria and all structures in the Oroville Division were reviewed to assure compliance with these criteria. Additional information on the earthquake is presented in Chapter IV in the Oroville Field Division section.

**Figure 3: PROJECT FACILITIES  
AND CONSTRUCTION DIVISIONS**



### Land Acquisition

The current land acquisition program includes land and right of way required for the initial facilities, together with that required for (1) portions of Phase II of the North Bay Aqueduct (to minimize paying for excessive escalation of land prices), (2) limited reaches of the Delta Facilities (to realize joint savings where canal excavation may be used in constructing a nearby portion of Interstate 5), (3) recreation developments associated with project facilities, and (4) investigation of acquisition of lands needed for alternative fish and wildlife enhancement proposals.

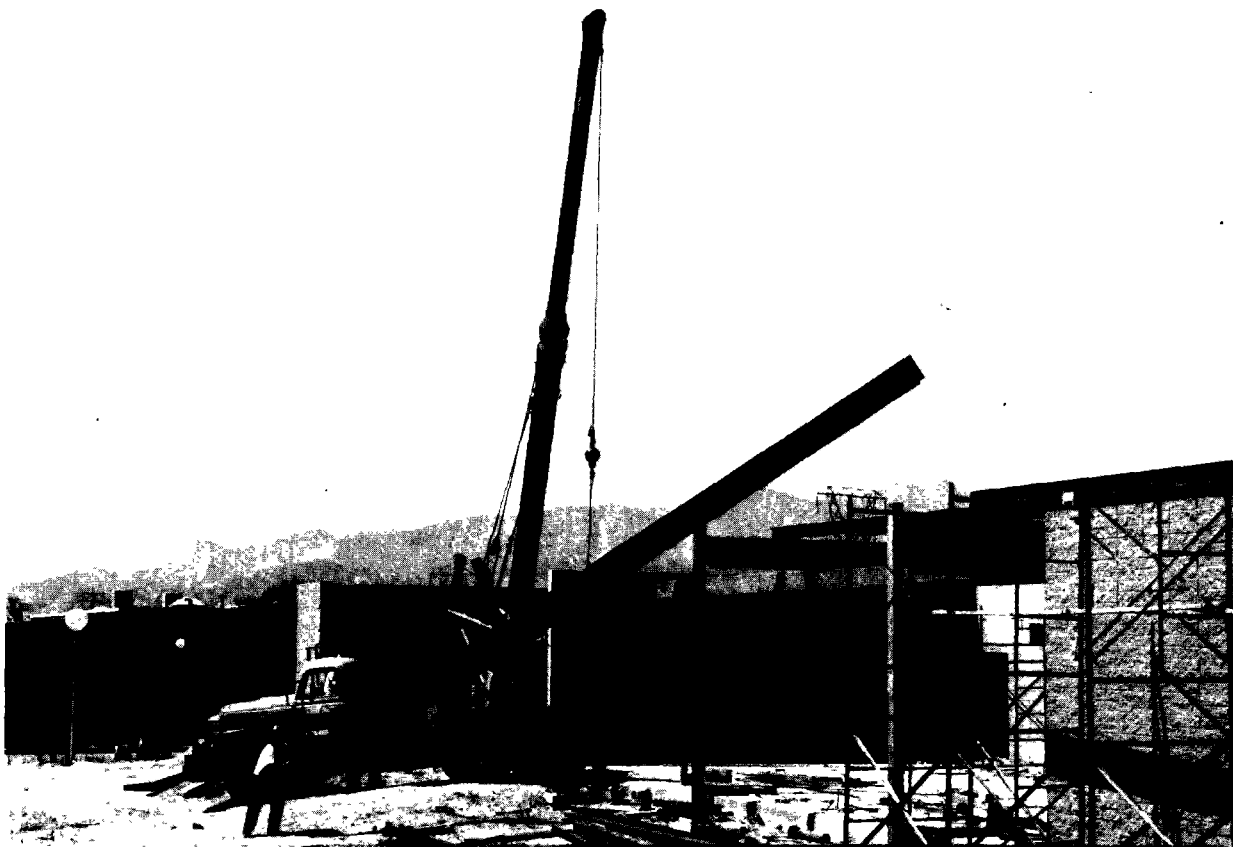
During 1975, approximately \$0.7 million was expended for land acquisition in excess of credits for sales of surplus property and returns of condemnation deposits. This brings the total net expenditure through 1975 to \$110.3 million, which is approximately 87 percent of the \$126.7 million estimated total cost of the current program.

Acquisition was completed for 44 parcels [677.35 hectares (1,673.75 acres)]. In addition, condemnation proceedings were concluded on two parcels. One hundred sixty-four parcels of excess land [191.39 hectares (472.92 acres)] were sold, bringing the total of such excess lands sold through 1975 to 719 parcels [1778.61 hectares (4,395.00 acres)]. The total number of land parcels required under the current land acquisition program is shown for each facility or construction division of the Project in the tabulation below, together with the total number of parcels acquired through 1975.

### Relocations

The Department executed 14 relocation agreements during the past year. These agreements raised the total outlay under all such agreements through 1975 to \$41.8 million—approximately 77 percent of the \$54.4 million estimated total relocation cost of the current program. In addition, 32 land exchange agreements were concluded during the past year.

Facility or Construction Division	Current Acquisition Program		
	Parcels Acquired in 1975	Total Parcels Acquired	Total Parcels Required
Feather River Facilities			
Upper Feather Division	0	22	29
Oroville Division	16	947	951
Delta Facilities	7	20	158
North Bay Aqueduct	0	21	72
South Bay Aqueduct	0	203	203
California Aqueduct:			
North San Joaquin Division	0	207	209
San Luis Division	0	22	22
South San Joaquin Division	2	571	574
Tehachapi Division	0	1	1
Mojave Division	6	1,615	1,646
Santa Ana Division	3	662	682
West Branch	10	273	297
Coastal Branch (Phase I)	0	48	48
Coastal Aqueduct	0	0	200
TOTAL	44	4,612	5,092



Construction at Southern California O&M Center

# Figure 4: GENERALIZED CONSTRUCTION SCHEDULE

FACILITY, CONSTRUCTION DIVISION OR FEATURE	CALENDAR YEAR									
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
UPPER FEATHER DIVISION										
ABBEY BRIDGE AND DIXIE REFUGE DAMS AND RESERVOIRS		(NOT SCHEDULED)								
DELTA FACILITIES		UNDER REVIEW								
ADDITIONAL PROJECT CONSERVATION FACILITIES	NOT SCHEDULED									
NORTH BAY AQUEDUCT (1)										
(PHASE II) LINDSEY SLOUGH THRU CORDELIA PUMPING PLANT										
NORTH SAN JOAQUIN DIVISION										
DELTA PUMPING PLANT, 11 UNITS										
UNITS 8, 9, 10, & 11										
SAN LUIS DIVISION										
SAN LUIS CANAL MODIFICATIONS										
SOUTH SAN JOAQUIN DIVISION										
SAN JOAQUIN OPERATION & MAINTENANCE CENTER										
TEHACHAPI DIVISION										
A. D. EDMONSTON PUMPING PLANT, 14 UNITS										
UNITS 10, 12, & 14 (FINAL) (1)										
PASTORIA SIPHON, SECOND BARREL										
MOJAVE DIVISION										
COTTONWOOD POWERPLANT (1)										
BUTTES DAM AND RESERVOIR										
PEARBLOSSOM PUMPING PLANT, 6 UNITS										
UNITS 1 & 2 (FINAL)										
SANTA ANA DIVISION										
DEVIL CANYON POWERPLANT, UNIT 2										
WEST BRANCH										
SOUTHERN CALIFORNIA OPERATION AND MAINTENANCE CENTER										
PYRAMID POWERPLANT (1)										
PEACE VALLEY PIPELINE (1)										
QUAIL FACILITIES (1)										
CASTAIC DAM OUTLET WORKS, STAGE II										
COASTAL BRANCH										
LAS PERILLAS AND BADGER HILL PUMPING PLANTS, 6 UNITS EACH										
UNIT 4, EACH PLANT										
UNIT 5, EACH PLANT										
UNIT 6, EACH PLANT										
DEVIL'S DEN PUMPING PLANT THRU SANTA MARIA TERMINUS										
PHASE II										
SAN JOAQUIN DRAINAGE FACILITIES										

1) Schedule being reviewed and subject to revision.

## Construction Progress

A generalized construction schedule for the contracts in progress and future contracts is shown on Figure 4.

During 1975, construction activities continued on the Mojave and Santa Ana Divisions, California Aqueduct, Phase II contracts. Remaining construction consisted of modifications to existing facilities of the Project, together with completion of control system contracts.

### **Feather River Facilities**

At Oroville, contracts to install trashracks and trashrack stabilizers, and replacement trashracks and trashrack stabilizers at Edward Hyatt (Oroville) Powerplant penstock intake structure were completed. Repairs to transformer heat exchangers at Edward Hyatt (Oroville) Powerplant; modification of radial gate seals at Oroville Dam spillway; and a contract for signs, logos, plaques, and flagpole at Oroville Visitors Center were also completed.

In 1975, the Department reached agreement with the Department of Parks and Recreation, Butte County Board of Supervisors, Butte County Historical Society, and other interested local organizations regarding the restoration of the Bidwell Bar Historical Artifacts. Subsequently, final design was initiated for the reconstruction of the Old Bidwell Bar Bridge and Tollhouse within the Kelley Ridge State Recreation Area. Reconstruction of both the Bridge, which will span the upper end of the Bidwell Bar Canyon, and the Tollhouse is scheduled to begin in the summer of 1976.

### **North Bay Aqueduct**

Phase I of the North Bay Aqueduct is complete and operational.

### **South Bay Aqueduct**

All of the South Bay Aqueduct is complete and operational. At the South Bay Pumping Plant a contract covering repair and reconditioning of the pump motors was completed and a contract to provide air conditioning and ventilation was in progress.

### **California Aqueduct**

**General.** Among the contracts completed in 1975 were California Aqueduct Control System, Southern California area; Facility Modification Contracts Nos. 1 and 2; Southern Field Division Air Conditioning Modifications; and Santa Ana Valley Pipeline, Miscellaneous Metalwork.

Contracts for acoustic flowmeters at checks 12 and 21, California Aqueduct; project operations control center uninterruptible power supply system; and modem interface units for power demand monitors were in progress.

The power demand monitors at all the pumping and power plants on the California Aqueduct (ex-

cept Castaic Powerplant) record the electrical load (demand) at each plant. The new interface units will convert this demand information into a form that is compatible with the aqueduct control system.

**North San Joaquin Division.** All facilities in this division are operational. A contract covering air conditioning and miscellaneous modifications at the Delta Pumping Plant was initiated.

**San Luis Division.** This division is complete and operational.

**South San Joaquin Division.** Contracts for San Joaquin turnouts, gate operators, and Greater Bakersfield Turnout were completed.

Contracts providing for an equipped instrument building and an acoustic flowmeter for the Greater Bakersfield Turnout, electronic control assemblies for existing turnouts, and completion of the South San Joaquin O&M Center were initiated during the year and are scheduled to be completed in 1976.

**Tehachapi Division.** Contracts for the motors and motor generators and also for the control system at the A. D. Edmonston Pumping Plant (Tehachapi) were completed.

A contract providing for a pump air supply system at A. D. Edmonston Pumping Plant (Tehachapi) was in progress.

**Mojave Division.** Contracts completed in this division include those providing for the control system and the second discharge line at Pearblossom Pumping Plant; the check structure and control house at Mile 374; the second barrel of the Antelope Siphon; and chemical grouting of the air shaft and construction of the seepage measuring facility at Cedar Springs Dam.

The contracts covering the pumps and motors at Pearblossom Pumping Plant continued behind schedule. Unit No. 2 is expected to be operational by October 1976, with Unit No. 1 operable in late December 1976.

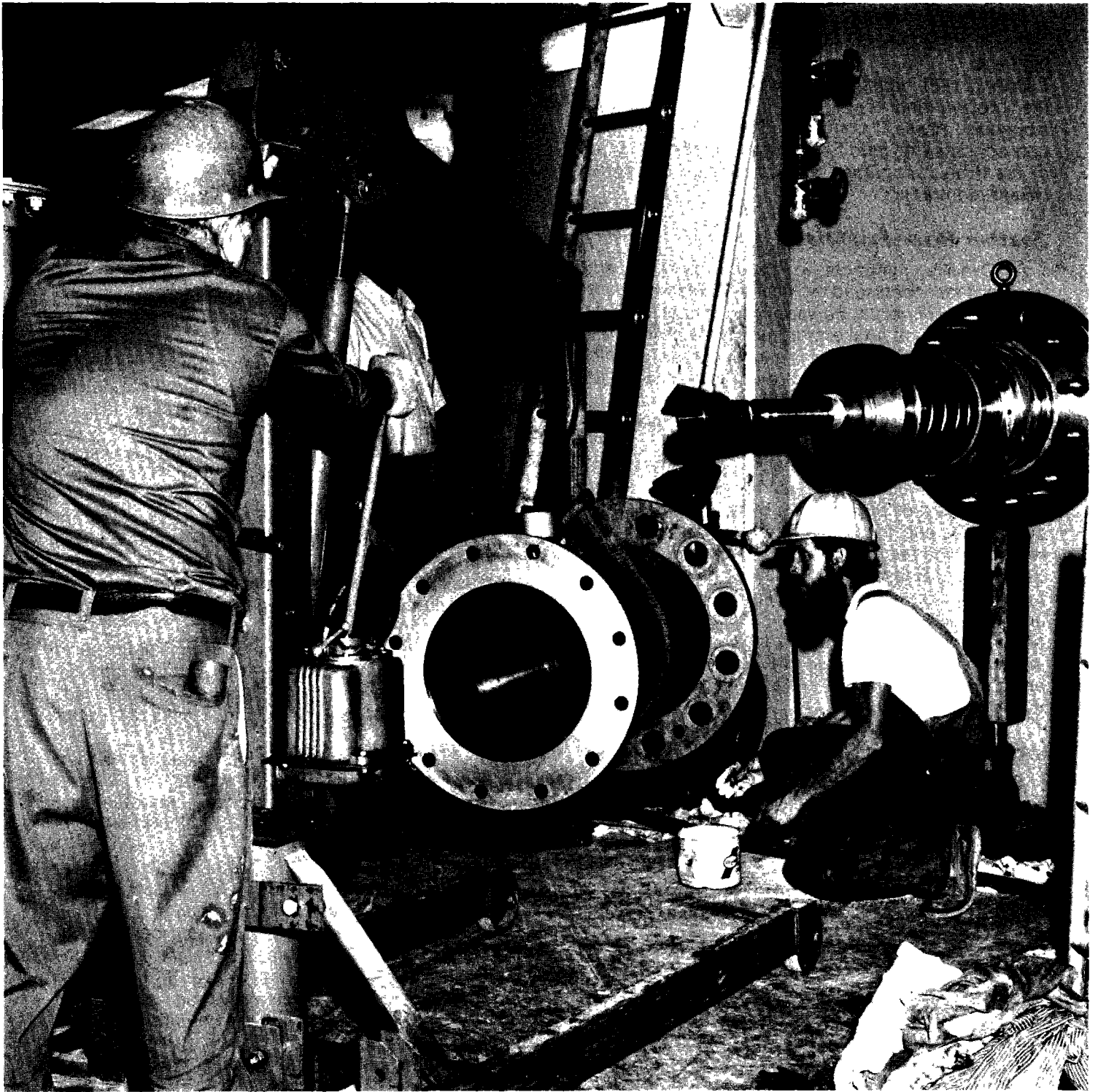
**Santa Ana Division.** The initial facilities are all operational, and the contract for Perris Dam Visitors Center was completed during the year.

Progress continued on all contracts pertinent to the second unit at Devil Canyon Powerplant and initial operation is expected in late July 1976. Progress also continued on contracts providing for hydraulic piping modifications at the San Bernardino Tunnel Intake Tower, and for a release facility, seepage collection facilities, and modifications to the seismic instrumentation all at Perris Dam.

**West Branch.** Included among the contracts completed this year in the West Branch were those providing for an outlet structure instrument vault at Quail Lake, completion of Pyramid Dam, and the Castaic Dam Visitors Center. Construction continued on Castaic Lake Forest Service Road 6N13 and Southern California O&M Center.

**Coastal Branch.** This branch is operational from the California Aqueduct to the site of the proposed Devil's Den Pumping Plant, about 14 miles west of Avenal Gap (Phase I).





Devil Canyon Powerplant Construction



## CHAPTER III. PROJECT UTILITY MANAGEMENT

This is a progress report on management of the Project's water and power utility during 1975, covering arrangements for (1) securing water rights and pumping power and (2) marketing developed water supplies and project power generation.

### **Water Rights Management**

During 1975 water rights management activities by the Department included the following:

#### ***Delta Water Quality Monitoring and Reporting***

Decision 1379 of the State Water Resources Control Board includes interim Delta water quality standards which requires, under certain circumstances, state and federal projects to either reduce the level of exports from the Sacramento-San Joaquin Delta or increase the releases from upstream storage reservoirs. It also orders an extensive Delta water quality monitoring program and declares the Board's intent to reconsider the standards by July 1, 1978, based on experience to be gained from working with interim criteria and the knowledge gained from the Interagency Ecological Study Program for the Sacramento-San Joaquin Estuary.

While the terms and conditions of Decision 1379 have been stayed by court order (see page 17, Bulletin 132-72), the Department is making releases to meet the standards in the Decision. During 1975, all water quality criteria in that Decision as well as criteria in Decisions 1275 and 1291 (the Project's basic water rights, see pages 62 through 64 in Bulletin No. 132-68) were met. In Decision 1379 there is a provision for the protection of fish and wildlife requiring that export pumping be minimized for a five-week period from April 25 through May 31 of each year during the peak of the striped bass spawning. At the request of the Department of Fish and Game, this period was modified and extended as a test (see the section on the Fish Test in Chapter I). This test period was initiated on May 15 and extended through July 31, an additional 42 days over that in Decision 1379. During this period, State Water Project diversions were limited to those necessary for deliveries to the South Bay Aqueduct and Oak Flat Water District. Water supplies to meet other aqueduct deliveries during this period were obtained from San Luis Reservoir.

Water quality information and data on Delta water conditions are stored in the Department's Water Data Information System. These data can be obtained by any state agency through the Department.

The Department is cooperating with the State Water Resources Control Board and other agencies in an analysis of the virtues of the Department's information system and the Environmental Protection Agency's "Storet" system in order to adopt a common Electronic Data Processing system for water quality related data.

The Department continued to implement activities outlined in its established planning network covering the first two phases of a four-phase program (see page 19, Bulletin 132-73) for monitoring Delta water quality as specified in Decision 1379. The first two phases involve expansion of previous monitoring activities and an increase of equipment and personnel, and the final two phases involve a series of petitions to the Board seeking clarification or modification of the Decision, to be filed after current legal action is resolved.

During 1975 Phase II included sampling an average of 25 parameters at each of 26 sites throughout the estuary on a biweekly basis. With respect to both the number of parameters and sites sampled, the monitoring program was about 85 percent in compliance with the Decision. Although the Decision states that sampling will be performed weekly, the Department believes biweekly sampling yields essentially the same results. Biweekly sampling will be one of the items included in the petitions to the Board under the final two phases of the monitoring program.

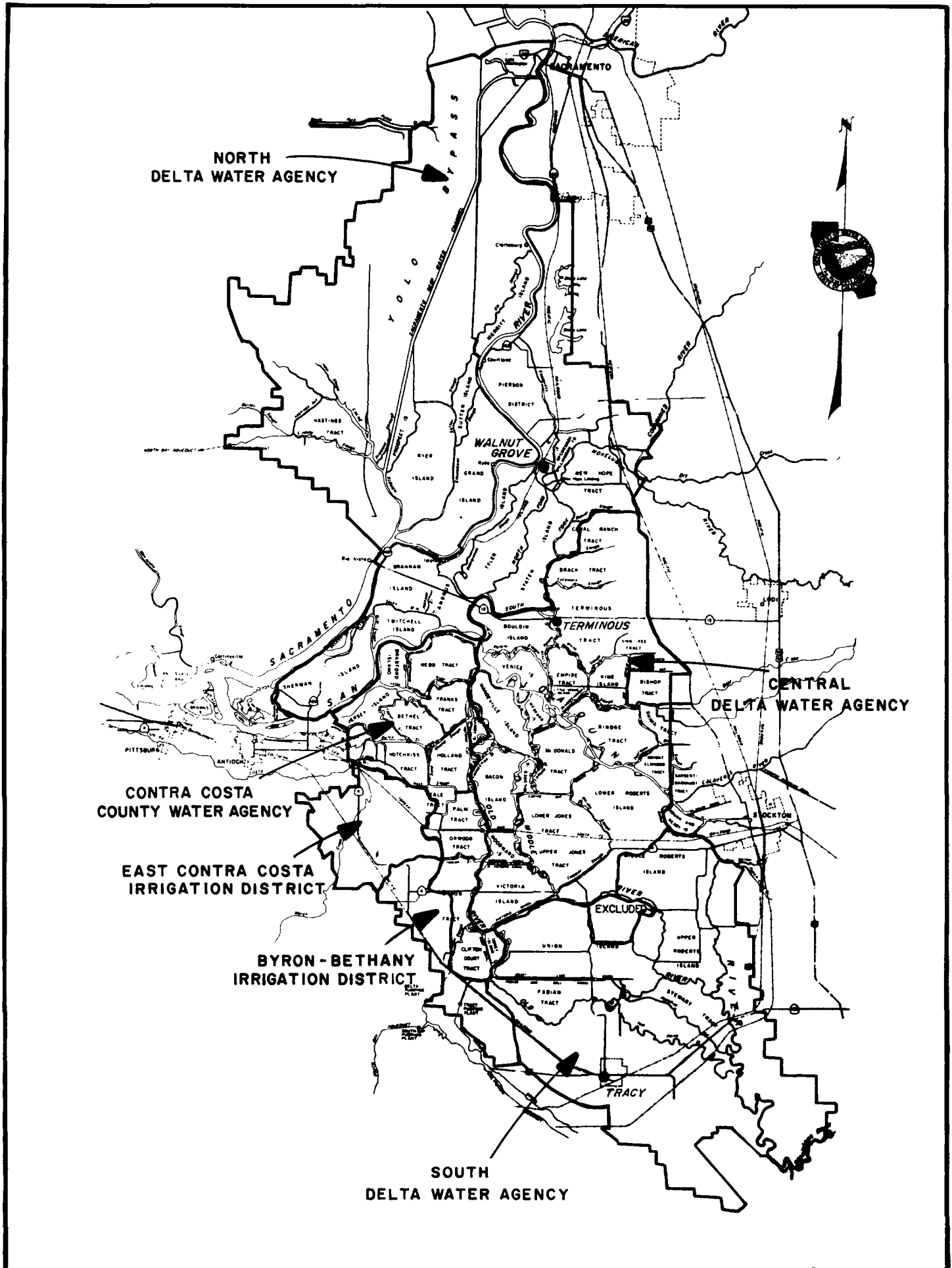
Work continued on evaluating onshore monitoring sites, and development data handling and reporting procedures. The new water quality work boat, M. V. San Carlos, was constructed and outfitted during 1975 and was delivered to the Department in January 1976 and will become operational in the spring of 1976. The laboratory facilities on the M. V. San Carlos will expand the Department's capability so that all portions of Phase II of the monitoring program can be achieved.

#### ***Feather River Entitlement Negotiations***

During 1975 negotiations with Garden Highway Mutual Water Company reached an impasse. The Department filed suit in Sutter County Superior Court on December 17, 1975 (see Litigation Section in Chapter I) asking the court to resolve the issue of the Company's water right.

One agreement with a riparian user was executed; negotiations continued with three appropriative water users and eight riparian water users along the Feather River. (These totals are subject to change as water users initiate or discontinue diversions from the river.)

**Figur 5: SACRAMENTO-SAN JOAQUIN DELTA AGENCIES**



## ***Delta Water Entitlement Negotiations***

***Municipal Water Use.*** Previous bulletins have referred to the administration of completed agreements with municipal water users in the western Delta—the Contra Costa County Water District and the City of Antioch (see page 20, Bulletin 132–67). Both agencies had above-average water supplies during the 1975 water year as defined in the contracts. The District had a credit of 129 days and the City a credit of 408 days; including the credits accumulated in previous years, the District and the City now have total credits of 237 and 539 days, respectively. These credits for above-average offshore water supply are available to offset below-average days in future years.

***Industrial Water Use.*** As discussed in previous bulletins of this series, negotiations with the industrial water users in the western Delta have been delayed pending development of a basis acceptable to the U. S. Bureau of Reclamation. The Department is interested in reaching agreement with the industries to provide them with a replacement water supply (via the Contra Costa Canal) to compensate for any possible loss of offshore water of adequate quality due to joint operation of the State Water Project and the federal Central Valley Project. The U. S. Bureau of Reclamation has been reluctant to agree to any responsibility due to the operation of the federal project. This has been the major obstruction to negotiations since the industries desire a total solution to the reduced offshore water supply problem. Late in 1975 a proposed basis to resolve the problem was developed and submitted to the Director for his approval. Active negotiations with the industries, the Contra Costa County Water District, and the U. S. Bureau of Reclamation are anticipated in 1976.

## ***Agricultural Negotiations***

Beginning in 1974 six agencies representing agri-

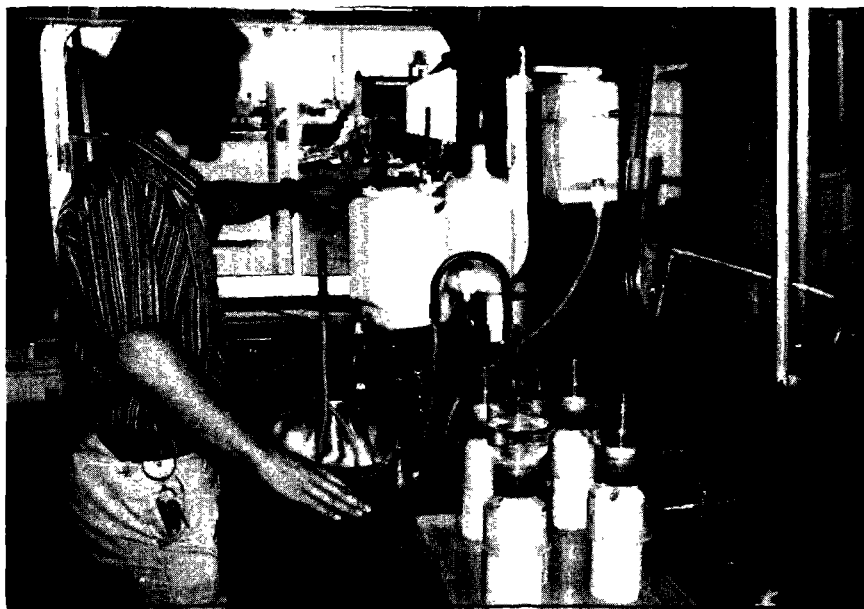
cultural water interests in the Delta succeeded to the overall interests of the Delta Water Agency which ceased to exist December 31, 1973. These are the North, Central, South and Contra Costa County Water Agencies and East Contra Costa and Byron–Bethany Irrigation Districts and are shown in Figure No. 5. Negotiations continued during 1975 with two of these agencies.

***East Contra Costa Irrigation District.*** Negotiations with East Contra Costa Irrigation District continue in abeyance at the request of the District's staff pending more progress with one of the "big three agencies" to assure contracts with common terms if at all possible.

***North Delta Water Agency.*** Department representatives met with representatives of the Agency and the U. S. Bureau of Reclamation several times during 1975 to develop a basis for a Delta contract. Late in 1975 a basis was developed and will be presented to each group's directors, the Department, the Bureau, and the Agency early in 1976.

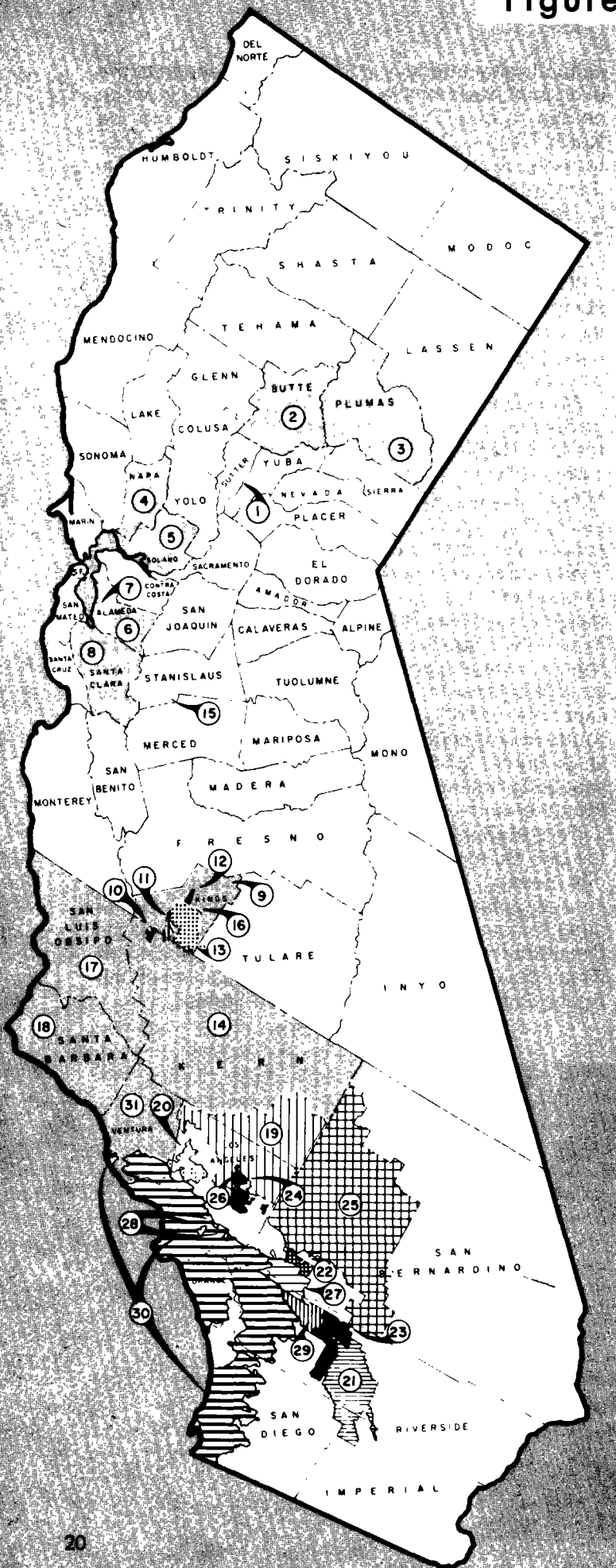
***South Delta Water Agency.*** Representatives of the Department, the U. S. Bureau of Reclamation, and the Agency have met several times during the year. In 1974 the Agency submitted a draft contract which specifies water quality, water level, and water flow control criteria throughout the southeast Delta. The exact manner of meeting such criteria would be up to the operating agencies. The Department and the U. S. Bureau of Reclamation submitted a counterproposal. Neither proposal was fully acceptable to the other and negotiations continue.

***Central Delta Water Agency.*** Representatives of the U. S. Bureau of Reclamation and the Agency held one meeting during 1975 to explore solutions to the several problems which the Agency feels will require congressional action. By request of the Agency, the Department has not participated in these discussions which have been limited to items peculiar to the Agency's relationship to the United States.



Laboratory on "M. V. San Carlos"  
(additional picture on page 51)

# Figure 6: LONG-TERM WATER SUPPLY



Location No.	Contracting Agency	Total Cumulative Deliveries through Dec. 31, 1975 (acre-feet) <sup>(a)</sup>	Maximum Annual Entitlement (acre-feet) <sup>(a)</sup>
<b>UPPER FEATHER AREA</b>			
1	City of Yuba City	0	9,600
2	County of Butte	811	27,500
3	Plumas County Flood Control and Water Conservation District	2,371	2,700
	<b>Subtotal</b>	<b>3,182</b>	<b>39,800</b>
<b>NORTH BAY AREA</b>			
4	Napa County Flood Control and Water Conservation District	29,189	25,000
5	Solano County Flood Control and Water Conservation District		42,000
	<b>Subtotal</b>	<b>29,189</b>	<b>67,000</b>
<b>SOUTH BAY AREA</b>			
6	Alameda County Flood Control and Water Conservation Dist., Zone 7	112,180	46,000
7	Alameda County Water District	192,455	42,000
8	Santa Clara Valley Water District	777,690	100,000
	<b>Subtotal</b>	<b>1,082,325</b>	<b>188,000</b>
<b>SAN JOAQUIN VALLEY AREA</b>			
9	County of Kings	10,700	4,000
10	Devil's Den Water District	101,031	12,700
11	Dudley Ridge Water District	364,778	57,700
12	Empire West Side Irrigation District	34,562	3,000
13	Hacienda Water District	46,219	8,500
14	Kern County Water Agency	3,297,531	1,153,400
15	Oak Flat Water District	45,710	5,700
16	Tulare Lake Basin Water Storage District	864,785	110,000
	<b>Subtotal</b>	<b>4,765,316</b>	<b>1,355,000</b>
<b>CENTRAL COASTAL AREA</b>			
17	San Luis Obispo County Flood Control and Water Conservation District	0	25,000
18	Santa Barbara County Flood Control and Water Conservation District	0	57,700
	<b>Subtotal</b>	<b>0</b>	<b>82,700</b>
<b>SOUTHERN CALIFORNIA AREA</b>			
19	Antelope Valley-East Kern Water Agency	9,400	138,400
20	Castaic Lake Water Agency	0	41,500
21	Coachella Valley County Water Dist.	19,200	23,100
22	Crestline-Lake Arrowhead Water Agency	2,377	5,800
23	Desert Water Agency	30,000	38,100
24	Little Rock Creek Irrigation Dist.	2,051	2,300
25	Mojave Water Agency	69	50,800
26	Palmdale Water District	0	17,300
27	San Bernardino Valley Municipal Water District	64,171	102,600
28	San Gabriel Valley Municipal Water District	6,062	28,800
29	San Geronimo Pass Water Agency	0	17,300
30	The Metropolitan Water District of Southern California	1,036,494	2,011,500
31	Ventura County Flood Control Dist.	0	20,000
	<b>Subtotal</b>	<b>1,169,824</b>	<b>2,497,500</b>
	<b>TOTAL STATE WATER PROJECT</b>	<b>7,049,836</b>	<b>4,230,000</b>
<b>NET TOTALS, STATE WATER PROJECT SERVICE AREA</b>			
<b>TOTAL, STATE OF CALIFORNIA</b>			
<b>PERCENT, STATE WATER PROJECT OF TOTAL</b>			

- a) Metric conversion is acre-feet times 1.2335 equals cubic dekameters.  
b) Metric conversion is acres times 0.40469 equals hectares.  
c) Total for Plumas County Flood Control and Water Conservation District, including Last Chance Creek Water District.  
d) Total for County of Kings, including Dudley Ridge Water District, Empire West Side Irrigation District, Hacienda Water District, most of Tulare Lake Basin Water Storage District, and about 40% of Devil's Den Water District.

# CONTRACTING AGENCIES

## Water Contracts Management

The State, through the Department of Water Resources, has entered into long-term water supply contracts with 31 agencies. Each contract obligates the State to deliver a specified annual amount of state project water to the contracting agency. The annual amount of project water to which each agency is entitled is shown in Table A of its contract. These annual entitlements are generally initially small, increasing each year thereafter until the maximum annual entitlement is reached. The combined maximum annual entitlements of all agencies total 5 217 705 cubic dekametres (4,230,000 acre-feet)—the amount established as the maximum which the State could contract to deliver.

The names and locations of the 31 agencies, together with other pertinent information, are shown in Figure 6. The agencies, it will be noted, encompass about one-quarter of the State's land area and contain about 65 percent of the State's assessed valuation and 69 percent of its population. Each agency's annual entitlements are shown in Table B-4 of Appendix B. Table B-5A and B-5B show each agency's historical and projected annual deliveries both by aqueduct reach and in total.

Columns 1 through 6 of Table 1 summarize the annual entitlements shown in Table B-4 by major project service areas. Column 7 shows the total annual entitlement amounts for all contractors and Column 8 the total actual and projected entitlement water deliveries. As will be noted, actual and presently projected annual entitlement water deliveries are less than the total annual entitlement amounts. This is a reflection of the difference between the projected project water needs of certain contractors at the time the contracts were executed and the lower actual needs through 1975 and presently projected needs beyond 1975. Contractors who have to date utilized less project water than their annual entitlements, and who expect to continue to do so for a number of years, contracted for project water to meet projected increases in municipal and industrial water needs. Reduced population growth, both actual and projected, has resulted in the lower project water needs shown in Column 8. An evaluation of the water needs of each contractor is a key aspect in the study of alternatives in the Delta. Another important aspect of the study is the result of discussions with the contractors concerning potential savings in water through both water conservation and water reclamation activities.

Agencies utilizing project water primarily for agricultural purposes, on the other hand, have used project water in amounts exceeding their annual entitlements. These agencies, located in the San Joaquin Valley, have each year been able to utilize substantial quantities of surplus water and probably will continue to request surplus water as long as it is available. Actual and projected surplus water deliver-

Total Payments through Dec. 31, 1975 (dollars)	Gross Area as of July 1, 1975 (acres) <sup>(b)</sup>	Assessed Valuation 1975-76 (dollars)	Estimated Population (July 1, 1975)	Location No.
0	2,700	50,145,000	15,450	1
189,000	1,064,000	435,116,000	118,300	2
<u>130,000</u>	<u>1,644,000<sup>(c)</sup></u>	<u>135,588,000<sup>(c)</sup></u>	<u>13,100<sup>(c)</sup></u>	3
319,000	2,710,700	620,849,000	146,550	
1,955,000	508,000	362,686,000	88,600	4
<u>99,000</u>	<u>528,400</u>	<u>594,102,000<sup>(c)</sup></u>	<u>181,700</u>	5
2,054,000	1,036,400	956,788,000	270,300	
5,708,000	272,000	382,028,927	106,000	6
7,397,000	61,700	661,845,542	175,000	7
<u>28,032,000</u>	<u>849,000</u>	<u>4,279,331,888</u>	<u>1,200,000</u>	8
41,137,000	1,182,700	5,323,206,357	1,481,000	
189,000	893,000 <sup>(d)</sup>	228,803,000 <sup>(d)</sup>	68,200 <sup>(d)</sup>	9
1,666,000	8,500	1,258,700	50	10
3,307,000	29,900	3,539,600	50	11
310,000	7,500	744,600	50	12
400,000	15,300	244,800	50	13
53,133,000	5,057,200 <sup>(e)</sup>	1,925,677,000 <sup>(e)</sup>	342,800 <sup>(e)</sup>	14
311,000	4,000	275,000	50	15
<u>7,086,000</u>	<u>193,000</u>	<u>14,750,000</u>	<u>50</u>	16
66,402,000	6,208,400	2,175,292,700	411,300	
1,083,000	2,131,300	543,405,092	127,800	17
<u>2,558,000</u>	<u>1,756,900</u>	<u>951,892,996</u>	<u>281,300</u>	18
3,641,000	3,888,200	1,495,298,088	409,100	
15,610,000	1,524,900	459,495,912	92,500	19
6,809,000	125,000	230,776,565	60,100	20
4,225,000	637,100	337,393,688	70,900	21
1,167,000	53,700	73,508,505	11,200	22
6,957,000	209,300	252,137,119	40,100	23
320,000	43,300	6,870,945	1,800	24
7,901,000	3,160,400	356,287,190	67,600	25
2,077,000	73,800	58,003,017	23,400	26
24,786,000	209,400	755,796,430	342,000	27
6,339,000	16,200	400,343,594	146,300	28
3,649,000	140,600	67,989,248	28,100	29
407,103,000	3,129,600	39,585,365,754	10,830,000	30
<u>2,948,000</u>	<u>1,179,500<sup>(f)</sup></u>	<u>1,609,320,144<sup>(f)</sup></u>	<u>438,200<sup>(f)</sup></u>	31
<u>489,891,000</u>	<u>10,502,800</u>	<u>44,193,288,111</u>	<u>12,152,200</u>	
603,444,000	25,529,200 <sup>(g)</sup>	54,764,722,256 <sup>(g)</sup>	14,870,450 <sup>(g)</sup>	
	24,164,734 <sup>(h)</sup>	53,664,018,350 <sup>(h)</sup>	14,574,200 <sup>(h)</sup>	
	100,314,000	82,692,000,000	21,113,000	
	24.1	64.9	69.0	

e) Total for Kern County Water Agency, including about 60% of Devil's Den Water District, and about 50% of Antelope Valley-East Kern Water Agency.

f) Total for Ventura County Flood Control District, including portions of Antelope Valley-East Kern Water Agency, The Metropolitan Water District of Southern California, and Castaic Lake Water Agency.

g) Includes duplicate values for overlapping agency areas.

h) Excludes all overlapping areas.

TABLE 1: ANNUAL

(in acre-

Calendar Year	Annual Entitlements Under Long-term Water Supply Contracts						
	Feather River Area	North Bay Area	South Bay Area	San Joaquin Valley Area	Central Coastal Area	Southern California Area	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1962	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0
1967	0	0	11,538	0	0	0	11,538
1968	550	0	109,900	81,050	0	0	191,500
1969	620	0	98,700	168,075	0	0	267,395
1970	700	0	114,200	207,700	0	0	322,600
1971	890	0	116,200	258,500	0	0	375,590
1972	970	0	118,300	420,766	0	201,723	741,759
1973	1,100	0	120,400	392,352	0	472,400	986,252
1974	1,230	0	122,400	470,350	0	588,220	1,182,200
1975	1,610	0	124,500	526,150	0	704,250	1,356,510
Subtotal for 14 years 1962-1975	7,670	0	936,138	2,524,943	0	1,966,593	5,435,344
1976	1,990	0	126,500	535,600	0	824,780	1,488,870
1977	2,420	0	128,600	594,100	0	942,201	1,667,321
1978	2,850	0	130,700	651,600	0	1,060,722	1,845,872
1979	3,280	0	132,700	707,700	0	1,177,873	2,021,553
1980	4,710	19,250	134,800	765,000	2,200	1,304,914	2,230,874
1981	10,390	21,750	137,000	828,500	3,300	1,425,865	2,426,805
1982	12,270	24,400	139,200	889,200	6,600	1,546,806	2,618,476
1983	14,200	27,050	141,400	955,500	9,900	1,668,557	2,816,607
1984	16,130	29,600	143,600	1,017,900	14,900	1,790,398	3,012,528
1985	19,060	32,750	145,800	1,079,100	24,800	1,912,549	3,214,059
10 years, 1976-1985	87,300	154,800	1,360,300	8,024,200	61,700	13,654,665	23,342,965
10 years, 1986-1995	340,420	587,500	1,650,200	13,032,300	688,000	23,869,646	40,168,066
10 years, 1996-2005	386,460	670,000	1,878,000	13,550,000	827,000	24,975,000	42,286,460
10 years, 2006-2015	393,170	670,000	1,880,000	13,550,000	827,000	24,975,000	42,295,170
10 years, 2016-2025	398,000	670,000	1,880,000	13,550,000	827,000	24,975,000	42,300,000
10 years, 2026-2035	398,000	670,000	1,880,000	13,550,000	827,000	24,975,000	42,300,000

a) Metric conversion is acre-feet times 1.2335 equals cubic dekameters.

b) Amounts shown for 1976 through 1985 are the lesser of contractors' estimates or availability based on the assumption that a lower quartile water supply would be available during each of those years.

ADDENDUM TO FOOTNOTE b: Prior to press time it became apparent that the 1976 water supply would be far below that which would be available in a lower quartile water supply year. This circumstance, in addition to affecting the 1976 surplus water, may have a carryover effect which could limit surplus water availability to amounts substantially below those shown in Column 9 above for 1977 and beyond.

# WATER REQUIREMENTS

feet)<sup>(a)</sup>

Estimated Annual Water Demands								Calendar Year
Deliveries to Contracting Agencies				Initial Fill	Operational Losses and Storage Changes	Recreation Water	Total	
Entitlement Water	Surplus Water <sup>(b)(c)</sup>	Repayment Water and Regulated Delivery of Local Supply <sup>(d)</sup>	Total					
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	
0	0	18,289	18,289	9	272	0	18,570	1962
0	0	22,456	22,456	71	185	0	22,712	1963
0	0	32,507	32,507	171	152	0	32,830	1964
0	0	44,105	44,105	93	729	0	44,927	1965
0	0	67,928	67,928	0	1,746	0	69,674	1966
11,538	0	53,605	65,143	8,328	4,212	0	77,683	1967
171,709	121,534	14,777	308,020	498,926	117,906	0	924,852	1968
193,020	72,397	18,829	284,246	510,614	72,196	0	867,056	1969
233,993	133,024	38,080	405,097	23,947	2,435	0	431,479	1970
357,340	296,019	44,119	697,478	7,853	5,812	8	711,151	1971
611,801	423,964	66,638	1,102,403	100,274	53,062	6,489	1,262,228	1972
694,460	296,416	42,511	1,033,387	204,638	54,953	1,083	1,294,061	1973
874,075	417,676	46,224	1,337,975	246,620	13,046	2,118	1,599,759	1974
1,224,457	622,902	63,793	1,911,152	103,352	-94,330	3,377	1,923,551	1975
4,372,393	2,383,932	573,861	7,330,186	1,704,896	232,376	13,075	9,280,533	14 years, 1962-1975
1,396,962	737,803 <sup>(e)</sup>	118,299	2,253,064	77,354	327,628	6,121	2,664,167	1976
1,619,531	917,619	191,858	2,729,008	4,360	-25,362	6,606	2,714,612	1977
1,704,780	713,476	192,495	2,610,751	4,360	-24,502	7,116	2,597,725	1978
1,813,362	693,248	192,650	2,699,260	0	326,979	7,542	3,033,781	1979
1,919,252	497,669	192,805	2,609,726	0	23,714	8,067	2,641,507	1980
2,027,770	626,418	187,300	2,841,488	0	198,988	17,204	3,057,680	1981
2,131,960	737,006	182,484	3,051,450	0	13,323	21,709	3,086,482	1982
2,279,541	682,969	172,500	3,135,010	0	296,957	23,670	3,455,637	1983
2,449,637	661,209	172,600	3,283,446	0	74,749	23,780	3,381,975	1984
2,622,505	641,259	165,300	3,429,064	0	19,282	23,900	3,472,246	1985
19,965,300	6,908,676	1,768,291	28,642,267	86,074	1,231,756	145,715	30,105,812	10 years, 1976-1985
33,055,548	-	-	33,055,548	0	1,793,710	243,740	35,092,998	10 years, 1986-1995
38,769,485	-	-	38,769,485	0	1,759,958	245,000	40,774,443	10 years, 1996-2005
40,876,270	-	-	40,876,270	0	1,800,299	245,000	42,921,569	10 years, 2006-2015
41,678,200	-	-	41,678,200	0	1,852,149	245,000	43,775,349	10 years, 2016-2025
41,700,000	-	-	41,700,000	0	1,842,760	245,000	43,787,760	10 years, 2026-2035

c) Values for the years 1970 through 1975 include deliveries to short-term contractors (Mustang Water District, 1970-72; Tracy Golf and County Club, 1974; Green Valley Water District, 1974-75).

d) Includes conveyance of federal CVP water to Cross Valley Canal.

e) Estimated deliveries as of December 21, 1975.

ies through 1985 are shown in Column 9 of Table 1. Column 10 shows miscellaneous deliveries which are defined in Footnote (a) of the table.

In addition to total water deliveries to contracting agencies summarized in Column 11, Table 1 shows past and projected water requirements associated with operation of the Project in Columns 12 and 13, deliveries required for the maintenance of project recreation developments in Column 14, and overall total annual deliveries in Column 15.

### Water Deliveries in 1975

Long-term water supply contracts with 24 contractors called for deliveries of 1 617 439 cubic dekametres (1,311,260 acre-feet) of entitlement water in 1975. Table 2 lists those 24 contractors and shows the quantity of entitlement water each had contracted to receive in 1975. Three of the contractors did not schedule or take any water during the year. Also shown for each of the remaining 21 contractors are the quantities of entitlement and surplus water

TABLE 2: SUMMARY OF 1975 ENTITLEMENT AND SURPLUS WATER SERVICE TO LONG-TERM CONTRACTORS

Long-term Contractor	Entitlement Water (acre-feet)(a)			Surplus Water (acre-feet)(a)	
	1975 Entitlement as of 1/1/75	Scheduled as of 1/1/75	Delivered	Scheduled 12/1/74 and 5/2/75 (b)	Delivered
UPPER FEATHER AREA					
Butte County	1,050	800	253	0	0
Plumas County FC&WCD	560	560	405	0	0
SOUTH BAY AREA					
Alameda County FC&WCD, Zone 7	16,000	16,000	4,618	0	0
Alameda County WD	20,500	20,500	986	0	0
Santa Clara Valley WD	88,000	88,000	88,000	12,000	18,470
SAN JOAQUIN VALLEY AREA					
County of Kings	1,600	1,600	1,600	0	0
Devil's Den Water District	10,700	10,700	10,700	3,257	7,495
Dudley Ridge Water District	26,200	35,850	40,555 (c)	35,850	40,555
Empire West Side ID	3,000	3,000	3,000	3,000	3,448
Hacienda Water Agency	3,600	3,600	3,758 (c)	3,600	3,759
Kern County Water Agency	385,500	385,500	410,820 (c)	393,533	410,820
Oak Flat Water District	3,400	3,400	3,576 (c)	2,300	3,576
Tulare Lake Basin WSD	46,900	82,500	82,500 (c)	129,040	132,206
SOUTHERN CALIFORNIA AREA					
Antelope Valley-East Kern WA	35,000	4,550	8,068	0	0
Castaic Lake Water Agency	7,500	0	0	0	0
Coachella Valley County WD	7,000	7,000	7,000	0	0
Crestline-Lake Arrowhead WA	1,450	770	825	0	0
Desert Water Agency	11,000	11,000	11,000	0	0
Littlerock Creek ID	520	520	520	165	356
Mojave Water Agency	15,400	0	0	0	0
Palmdale Water District	5,580	0	0	0	0
San Bernardino Valley MWD	52,500	52,500	13,865	0	0
San Gabriel Valley MWD	13,100	4,410	5,450	0	0
The Metropolitan WD of So. Calif.	555,200	555,200	526,958	0	0
TOTALS	1,311,260	1,287,960	1,224,457	582,745	620,685

a) Metric conversion is acre-feet times 1.2335 equals cubic dekametres.

b) For periods January through April and May through December, respectively.

c) Table A quantity for 1975 increased to this amount at year's end in compliance with Article 21(g)(3) of the long-term water supply contract.



which were scheduled to be delivered in 1975 and the quantities actually delivered.

Project water service in 1975 involved making deliveries of 2 357 406 cubic dekametres (1,911,152 acre-feet) of water to 27 customers (22 long-term and 5 noncontractors). Monthly deliveries to each customer are shown in Table 3 and include:

1 510 368 cubic dekametres (1,224,457 acre-feet) of entitlement water to 21 long-term contractors.

- 765 615 cubic dekametres (620,685 acre-feet) of surplus water to nine long-term contractors.

- 55 873 cubic dekametres (45,296 acre-feet) of local water to three long-term contractors and two noncontractors.

- 2 735 cubic dekametres (2,217 acre-feet) of surplus water to the Green Valley Water District, a non-contractor.

- 8 384 cubic dekametres (6,797 acre-feet) of pre-consolidation repayment water to the Buena Vista Water Storage District.

14 432 cubic dekametres (11,700 acre-feet) of federal Central Valley Project water to the United States Fish and Wildlife Service.

Other 1975 deliveries involving project facilities included 1 679 500 cubic dekametres (1,361,573 acre-feet) to federal customers from the joint-use San Luis Facilities and 1 032 636 cubic dekametres (837,159 acre-feet) from the Oroville Facilities to canal systems originally connected to the Feather River.

*Entitlement Water Deliveries.* Initially approved entitlement water delivery schedules called for delivery of full annual entitlements to 17 long-term contractors. Seven of these received the scheduled amounts while five received more than had been originally scheduled and five less. Three contractors were scheduled to receive no entitlement water in 1975 and four to receive amounts less than their annual entitlements (see Table 2).

Overall, 1 510 368 cubic dekametres (1,224,457 acre-feet) of entitlement water were delivered in 1975. Twelve contractors received a total of 200 335 cubic dekametres (162,412 acre-feet) less than the total of their 1975 entitlements. In all cases, nondelivery of the water was due to reduced contractor demands or the inability of the contractor to distribute project water within its service area.

Pursuant to the surplus water contracts and long-term contract amendments concerning surplus water, the State was required to increase the 1975 entitlements of Dudley Ridge Water District, Hacienda Water District, Kern County Water Agency, Oak Flat Water District, and Tulare Lake Basin Water Storage District (see Table 2). Each of the five had received project water during the year in an amount more than twice as large as its original 1975 entitlement. The resulting entitlement increases totaled 93 264 cubic dekametres (75,609 acre-feet).

*Deferred Deliveries.* As noted in the previous section, several contractors were unable to take delivery of all or a portion of their 1975 entitlement water. Table 3 shows for each contractor the quantity of 1975 entitlement water not delivered and cumulative totals of undelivered entitlement water through 1974 and through 1975.

Eight contractors have special "wet weather" provisions in their contracts. Pursuant to these provisions, the State is obligated to make up entitlement deliveries, if nondelivery was a result of above-normal local water supplies. The provisions also provide that in a year of below-average local water supply, the contractor may increase its annual entitlement and in a later year of above-average water supply may decrease its annual entitlement by an equal amount.

It was determined that the entitlement water which Alameda County Flood Control and Water Conservation District, Zone 7 and Alameda County Flood Control District did not receive in 1975 was not taken because of above-average local water supplies. The State is therefore obligated to deliver at some time in the future the 1975 undelivered entitlement water. Table 3 shows the cumulative total entitlement water which has not been delivered to the two contractors and the total credit each has accumulated to future delivery. Thirteen other contractors are shown in Table 3 to have received delivery of less than their full annual entitlements since the year of initial deliveries. Of the 13, only Santa Clara Valley Water District has the special "wet weather" provisions in its contract. The District, however, has obtained delivery of all entitlement water to which it had previously acquired a "future delivery credit" under the provisions. The State is therefore not obligated to make later delivery of any portion of the undelivered entitlement water to the remaining 12 contractors. As discussed in a following section entitled "Contract Amendments", the Department is working with contractors to develop an amendment which would provide that undelivered entitlement water, regardless of the reason for nondelivery, would either be delivered later or result in a monetary credit in lieu of later delivery.

Two contractors, Oak Flat Water District and Tulare Lake Basin Water Storage District, have had increases in their annual entitlements due to below-average local water supplies and have thereby acquired the right to make future reductions in their annual entitlements when above-average local water supplies are available. Such reductions can be up to the amounts shown in Table 3 in the column headed "Future Reductions".

*Surplus Water Service.* Surplus water deliveries during 1975 were made to nine long-term contractors. Service was provided under the 1974 surplus water contracts which were extended to cover service during calendar year 1975. Deliveries were also made to the Green Valley Water District, a noncon-

TABLE 3: WATER

(in acre-

Line No.	Contracting Agency and Type of Service	Month							
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.
FEATHER RIVER SERVICE AREA									
1.	County of Butte:								
	Entitlement Water . . . . .	0	0	49	30	18	71	0	55
2.	Last Chance Creek Water District:								
	Regulated Delivery of Local Supply. . . . .	0	0	0	0	3,610	5,891	2,463	5,964
3.	Plumas County Flood Control & Water Cons. District:								
	Entitlement Water . . . . .	26	15	19	25	50	75	80	65
4.	Thermalito Irrigation District:								
	Regulated Delivery of Local Supply. . . . .	0	0	0	1	20	102	171	62
5.	AREA TOTAL. . . . .	26	15	68	56	3,698	6,139	2,714	6,146
NORTH BAY SERVICE AREA									
6.	Napa County Flood Control & Water Cons. District:								
	Regulated Delivery of Local Supply. . . . .	664	562	658	711	714	377	148	470
SOUTH BAY SERVICE AREA									
Alameda County Flood Control & Water Cons. Dist., Zone 7:									
7.	Entitlement Water . . . . .	564	3	18	53	204	316	254	207
8.	Regulated Delivery of Local Supply. . . . .	662	575	835	767	771	1,909	2,015	2,047
9.	Agency Total. . . . .	1,226	578	853	820	975	2,225	2,269	2,254
Alameda County Water District:									
10.	Entitlement Water . . . . .	177	0	216	0	0	0	0	0
11.	Regulated Delivery of Local Supply. . . . .	542	0	0	0	655	98	1,430	932
12.	Agency Total. . . . .	719	0	216	0	655	98	1,430	932
Santa Clara Valley Water District:									
13.	Entitlement Water . . . . .	6,580	4,273	5,950	5,200	8,500	10,203	10,785	10,619
14.	Surplus Water . . . . .	1,000	1,000	0	1,081	1,599	0	0	0
15.	Agency Total. . . . .	7,580	5,273	5,950	6,281	10,099	10,203	10,785	10,619
16.	AREA TOTAL. . . . .	9,525	5,851	7,019	7,101	11,729	12,526	14,484	13,805
SAN JOAQUIN VALLEY SERVICE AREA									
17.	J. G. Boswell Company . . . . .	0	0	0	0	0	0	0	0
18.	Buena Vista Water Storage District:								
	Repayment of Preconsolidation Water . . . . .	1,465	2,062	410	410	370	480	500	500
19.	County of Kings:								
	Entitlement Water . . . . .	175	175	175	25	0	175	175	175
Devil's Den Water District:									
20.	Entitlement Water . . . . .	856	926	2,236	759	621	980	1,680	1,856
21.	Surplus Water. . . . .	834	1,414	242	344	325	0	1,139	740
22.	Agency Total. . . . .	1,690	2,340	2,478	1,103	946	980	2,819	2,596
Dudley Ridge Water District:									
23.	Entitlement Water . . . . .	680	820	1,370	3,420	4,100	6,300	6,300	6,800
24.	Surplus Water . . . . .	2,206	4,553	6,450	4,723	3,879	3,774	6,130	5,654
25.	Agency Total. . . . .	2,886	5,373	7,820	8,143	7,979	10,074	12,430	12,454
Empire West Side Irrigation District:									
26.	Entitlement Water . . . . .	150	150	200	200	200	500	500	500
27.	Surplus Water . . . . .	513	361	373	386	136	83	267	475
28.	Agency Total. . . . .	663	511	573	586	336	583	767	975
Green Valley Water District:									
29.	Surplus Water . . . . .	0	0	0	0	404	558	609	646
Hacienda Water District:									
30.	Entitlement Water . . . . .	200	400	400	400	600	500	487	413
31.	Surplus Water . . . . .	388	19	223	1,100	841	0	0	387
32.	Agency Total. . . . .	588	419	623	1,500	1,441	500	487	800
Kern County Water Agency:									
33.	Entitlement Water . . . . .	12,312	32,445	28,781	26,091	39,580	62,215	81,267	75,719
34.	Surplus Water . . . . .	23,771	20,920	42,153	32,320	44,642	56,574	58,371	62,292
35.	Agency Total. . . . .	36,083	53,365	70,934	58,411	84,222	118,789	139,638	138,011
Oak Flat Water District:									
36.	Entitlement Water . . . . .	0	0	11	600	764	600	600	650
37.	Surplus Water . . . . .	49	79	0	167	1,039	787	896	559
38.	Agency Total. . . . .	49	79	11	767	1,803	1,387	1,496	1,209
Tulare Lake Basin Water Storage District:									
39.	Entitlement Water . . . . .	5,100	3,520	7,020	3,520	0	3,481	14,840	14,840
40.	Surplus Water . . . . .	25,208	8,290	3,119	16,554	7,972	0	3,831	10,418
41.	Agency Total. . . . .	30,308	11,810	10,139	20,074	7,972	3,481	18,671	25,258
United States Fish and Wildlife Service									
	Conveyance of Federal CVP Water . . . . .	0	0	0	0	0	0	0	0
43.	AREA TOTAL. . . . .	73,907	76,134	93,163	91,019	105,473	137,007	177,592	182,624
SOUTHERN CALIFORNIA SERVICE AREA									
44.	Antelope Valley-East Kern Water Agency:								
	Entitlement Water . . . . .	175	474	241	310	933	896	1,196	1,126
45.	Castaic Lake Water Agency . . . . .	0	0	0	0	0	0	0	0
46.	Coachella Valley County Water District:								
	Entitlement Water . . . . .	595	539	595	574	595	574	595	595
47.	Crestline-Lake Arrowhead Water Agency:								
	Entitlement Water . . . . .	71	44	46	28	37	67	131	114
48.	Desert Water Agency:								
	Entitlement Water . . . . .	1,210	1,210	1,210	1,210	1,210	1,210	1,210	1,210
Little Rock Creek Irrigation District:									
49.	Entitlement Water . . . . .	0	30	23	0	0	70	158	173
50.	Surplus Water . . . . .	0	0	0	0	0	0	0	0
51.	Agency Total. . . . .	0	30	23	0	0	70	158	173
52.	Mojave Water Agency . . . . .	0	0	0	0	0	0	0	0
53.	Palmdale Water District . . . . .	0	0	0	0	0	0	0	0
San Bernardino Valley Municipal Water District:									
54.	Entitlement Water . . . . .	480	365	297	0	0	297	570	702
San Gabriel Valley Municipal Water District:									
55.	Entitlement Water . . . . .	112	62	0	0	0	45	0	694
The Metropolitan Water Dist. of Southern California:									
56.	Entitlement Water . . . . .	35,686	27,046	33,261	32,311	43,069	59,718	53,557	47,549
57.	AREA TOTAL. . . . .	38,329	29,770	35,673	34,433	45,844	62,877	57,417	52,163
ALL AGENCIES:									
58.	Entitlement Water . . . . .	65,149	72,497	82,118	74,756	100,481	148,293	174,385	164,062
59.	Surplus Water . . . . .	53,969	36,636	52,560	56,675	60,837	61,776	71,243	81,171
60.	Total Entitlement and Surplus Water . . . . .	119,118	109,133	134,678	131,431	161,318	210,069	245,628	245,233
61.	Regulated Delivery of Local Supply. . . . .	1,868	1,137	1,493	1,479	5,770	8,377	6,227	9,475
62.	Repayment of Preconsolidation Water . . . . .	1,465	2,062	410	410	370	480	500	500
63.	Conveyance of Federal CVP Water . . . . .	0	0	0	0	0	0	0	0
64.	TOTAL WATER . . . . .	122,451	112,332	136,581	133,320	167,458	218,926	252,355	255,208

a) Metric conversion is acre-feet times 1.2335 equals cubic dekametres.

b) Repayment of preconsolidation water.

c) Does not include possible credits for years 1974 and 1975.

# DELIVERIES IN 1975

Foot)(a

Month					1975 Contract Entitlement	1975 Entitlement Not Delivered	Net Cumulative Entitlement Not Delivered thru		Net Entitlement Credits Under "Net Weather" Provisions as of January 1, 1976		Line No.
Sept.	Oct.	Nov.	Dec.	Total			1974	1975	Deferred Delivery	Future Reductions	
2	4	24	0	253	1,050	797	2,742	3,539	-	-	1.
674	0	0	0	18,602	-	-	-	-	-	-	2.
38	12	0	0	405	560	155	794	949	-	-	3.
56	0	1	0	413	-	-	-	-	-	-	4.
770	16	25	0	19,673	1,610	952	3,536	4,488	-	-	5.
575	549	699	713	6,840	-	-	-	-	-	-	6.
50	975	967	1,007	4,618	16,000	11,382	35,288	46,670	45,374	0	7.
1,815	146	64	96	11,702	-	-	-	-	-	-	8.
1,865	1,121	1,031	1,103	16,320	-	-	-	-	-	-	9.
0	13	80	500	986	20,500	19,514	77,984	97,498	82,379	0	10.
594	146	1,125	2,217	7,739	-	-	-	-	-	-	11.
594	159	1,205	2,717	8,725	-	-	-	-	-	-	12.
10,712	9,473	5,400	305	88,000	88,000	0	38,714	38,714	0	0	13.
0	1,000	4,764	8,026	18,470	-	-	-	-	-	-	14.
10,712	10,473	10,164	8,331	106,470	-	-	-	-	-	-	15.
13,171	11,753	12,400	12,151	131,515	124,500	30,896	151,986	182,882	127,753	0	16.
0	0	0	0	0	-	-	-	-	92,087 <sup>(b)</sup>	-	17.
200	200	200	0	6,797	-	-	-	-	59,927 <sup>(b)</sup>	-	18.
175	175	0	175	1,600	1,600	0	0	0	0	0	19.
0	600	186	0	10,700	10,700	0	0	0	-	-	20.
694	311	423	1,029	7,495	-	-	-	-	-	-	21.
694	911	609	1,029	18,195	-	-	-	-	-	-	22.
5,421	2,280	624	2,440	40,555	40,555	0	0	0	-	-	23.
0	123	624	2,439	40,555	-	-	-	-	-	-	24.
5,421	2,403	1,248	4,879	81,110	-	-	-	-	-	-	25.
293	207	100	0	3,000	3,000	0	0	0	0	0	26.
0	88	391	375	3,448	-	-	-	-	-	-	27.
293	295	491	375	6,448	-	-	-	-	-	-	28.
0	0	0	0	2,217	-	-	-	-	-	-	29.
200	0	99	59	3,758	3,758	0	0	0	0	0	30.
600	42	99	60	3,759	-	-	-	-	-	-	31.
800	42	198	119	7,517	-	-	-	-	-	-	32.
22,588	14,372	13,193	2,257	410,820	410,820	0	0	0	-	-	33.
25,449	11,458	5,157	27,713	410,820	-	-	-	-	-	-	34.
48,037	25,830	18,350	29,970	821,640	-	-	-	-	-	-	35.
303	48	0	0	3,576	3,576	0	0	0	0	2,466	36.
0	0	0	0	3,576	-	-	-	-	-	-	37.
303	48	0	0	7,152	-	-	-	-	-	-	38.
11,008	11,780	7,391	0	82,500	82,500	0	0	0	0	74,852 <sup>(c)</sup>	39.
5,000	9,706	2,493	39,615	132,206	-	-	-	-	-	-	40.
16,008	21,486	9,884	39,615	214,706	-	-	-	-	-	-	41.
2,222	5,371	4,107	0	11,700	-	-	-	-	-	-	42.
74,153	56,761	35,087	76,162	1,179,082	556,509	0	0	0	0	77,318 <sup>(c)</sup>	43.
1,181	918	372	246	8,068	35,000	26,932	73,668	100,600	-	-	44.
0	0	0	0	0	7,500	7,500	10,636	18,136	-	-	45.
574	595	574	595	7,000	7,000	0	5,200	5,200	-	-	46.
96	69	53	69	825	1,450	625	1,004	1,629	-	-	47.
1,210	110	0	0	11,000	11,000	0	8,000	8,000	-	-	48.
66	0	0	0	520	520	0	0	0	-	-	49.
202	145	9	0	356	-	-	-	-	-	-	50.
268	145	9	0	876	-	-	-	-	-	-	51.
0	0	0	0	0	15,400	15,400	32,131	47,531	-	-	52.
0	0	0	0	0	5,580	5,580	8,820	14,400	-	-	53.
1,368	2,687	3,414	3,685	13,865	52,500	38,635	49,371	88,006	-	-	54.
1,188	1,473	684	1,192	5,450	13,100	7,650	23,310	30,960	-	-	55.
40,200	44,621	52,045	57,895	526,958	555,200	28,242	454,736	482,978	-	-	56.
46,085	50,618	57,151	63,682	574,042	704,250	130,564	666,876	797,440	-	-	57.
96,673	90,412	85,206	70,425	1,224,457	1,386,869	162,412	822,398	984,810	127,753	77,318 <sup>(c)</sup>	58.
31,945	22,873	13,960	79,257	622,902	-	-	-	-	-	-	59.
128,618	113,285	99,166	149,682	1,847,359	-	-	-	-	-	-	60.
5,714	841	1,889	3,026	45,296	-	-	-	-	-	-	61.
200	200	200	0	6,797	-	-	-	-	-	-	62.
2,722	5,371	4,107	0	11,700	-	-	-	-	-	-	63.
134,754	119,697	105,362	152,708	1,911,152	1,386,869	162,412	822,398	984,810	279,767	77,318 <sup>(c)</sup>	64.

tractor, under a 1975 surplus water contract. The State was able to deliver all the surplus water requested in 1975. As shown in Table 3, 1975 deliveries totaled 768 350 cubic dekametres (622,902 acre-feet).

**Preconsolidation Repayment Water.** In 1964, the Department entered into two contracts for the purpose of acquiring a water supply to preconsolidate the soils along the aqueduct route. The first was with Buena Vista Associates, Inc., now J. G. Boswell Company, and the other with Buena Vista Water Storage District. Repayment provisions of these contracts called for deliveries of project water to the two entities totaling 295 547 cubic dekametres (239,600 acre-feet) prior to 1985. By the end of 1975, 108 037 cubic dekametres (87,586 acre-feet) had been delivered leaving 73 920 cubic dekametres (59,927 acre-feet) to be delivered under the Buena Vista contract and 113 589 cubic dekametres (92,087 acre-feet) under the Boswell contract. In October 1975, the Department approved assignment of the Buena Vista contract to the Belridge Oil Company effective January 1, 1976. Belridge will produce steam from the project water acquired under the contract for use in its secondary oil recovery program.

**Wheeling of Federal Water.** The United States Fish and Wildlife Service needed about 14 432 cubic dekametres (11,700 acre-feet) of water in late 1975 in order to provide a suitable wintering area for waterfowl in the Kern National Wildlife Refuge. Cost of water which could be obtained from Kern County Water Agency was too expensive so the help of the State and the U. S. Bureau of Reclamation was sought. A water supply contract between the State, the Fish and Wildlife Service, and the Bureau resulted. The contract, which covered 1975 service only, provided that the Bureau would make scheduled

amounts of federal Central Valley Project water available at the downstream end of the joint-use San Luis Facilities and that the State would convey the water in the California Aqueduct from that point to a specified turnout in return for the payment of a wheeling charge. Revenues received for such wheeling will be credited to the capital costs of the reaches used for the wheeling.

The needed water was delivered during the months of September, October, and November. A total of 12 674 cubic dekametres (10,275 acre-feet) was delivered from Reach 10A for a state conveyance charge of \$1.00 per acre-foot and 1 758 cubic dekametres (1,425 acre-feet) were delivered from Reach 12E for a state conveyance charge of \$2.00 per acre-foot. The Fish and Wildlife Service is apparently interested in obtaining future annual supplies of water under a contract similar to the one discussed above. However, by year's end, the State had not participated in any discussion with the other two parties concerning such a contract.

### **Project Water Delivery Plans**

On about September 1, 1975, long-term contractors submitted projections of project water monthly delivery requirements for the seven-year period of 1976 through 1982. Previously such projections were obtained on October 1 of each year. The September 1 date was initiated in order to provide the Department more time in which to analyze future power requirements and to arrange for future power availability.

**Entitlement and Surplus Water.** The tabulation below shows the total entitlement water deliveries requested in 1975 for the following seven years as well as projections from prior years:

Projections Submitted in:	For Delivery of Entitlement Water During:						
	1976	1977	1978	1979	1980	1981	1982
	(acre-feet) (a)						
1975	1,382,962	1,619,531	1,704,780	1,813,362	1,931,607	2,027,770	2,131,960
1974	1,415,252	1,616,572	1,794,222	1,925,483	2,022,548	2,112,251	
1973 (b)	1,457,615	1,692,725	1,776,735	1,864,075			
1972	1,459,955	1,576,936	1,683,016				
1971	1,321,730	1,480,251					
1970	1,128,815						
Contracts Amount	1,488,870	1,667,321	1,845,872	2,021,553	2,230,874	2,426,805	2,618,476

a) Metric conversion is acre-feet times 1.2335 equals cubic dekametres.

b) Prior to 1974, six-year requests were submitted.

With one exception, projected requirements, as shown in the tabulation, have been consistently less than the total amounts which have been contracted for. This is primarily a reflection of the differences in population growth estimates made at the time the contracts were executed and those made in later years.

On about December 1, 1975, approved schedules calling for 1976 entitlement water deliveries totaling 1 687 998 cubic dekametres (1,368,462 acre-feet) were issued to 21 long-term contractors. Also, schedules calling for delivery of 291 187 cubic dekametres (236,066 acre-feet) of surplus water during the first four months of 1976 were issued to eight long-term contractors. Schedules of nine long-term contractors showed tentative approval of an additional 644 315 cubic dekametres (522,347 acre-feet) of surplus water during the last eight months of 1976.

Surplus water service to long-term contractors will again be provided under the terms of the 1974 surplus water contracts. The 1974 surplus water contracts of the nine contractors which were scheduled or tentatively scheduled to receive surplus water in 1976 were in the process of being extended to cover 1976 service at the end of 1975.

The amended surplus water provisions of the long-term contracts as well as the surplus water contracts provide that a contractor may have the State order power for future surplus water deliveries by making a commitment guaranteeing payment of the cost of power capacity estimated to be necessary to pump the requested amounts. The commitment becomes effective when the Department places an order for the power. Based on the commitments made by five contractors, the State has ordered power to pump the requested amounts of surplus water in the years 1978 through 1981. Table B-31 in Appendix B shows for each of the five contractors the requested water amounts and estimated cost each is committed to pay whether or not the deliveries can be made.

*Wheeling of Federal Central Valley Project Water.* The State entered into a contract, dated September 2, 1975, with the United States under which federal Central Valley Project water will be wheeled through state facilities from the Delta to the Kern County Water Agency's Cross Valley Canal turnout. The Bureau of Reclamation is to supply the water and all power needed for the conveyance of that water. A mutual understanding regarding adherence to water quality standards in the Delta was documented in an exchange of letters between the Department and the Bureau prior to the execution of this contract (see Cross Valley Canal in Chapter I).

The wheeled water will be that which has been contracted for by 10 agencies located in Kern, Tulare, and Fresno Counties. By year's end, five of the ten agencies had entered into contracts with the Bureau and the State which specified scheduling and payment procedures. Pursuant to those contracts, the

Department issued approved delivery schedules in December 1975 calling for deliveries of 15 348 cubic dekametres (12,443 acre-feet) of federal Central Valley Project water during the first four months of 1976. Statements of charges as called for in the contracts were also sent to the five agencies by year's end.

### ***Contract Amendments***

As of mid-January 1976, a total of 284 amendments to the long-term contracts had been executed. Amendments to each contract are summarized in Figure 7 by subject and amendment number. During the 12-month period preceding mid-January 1976, the following three amendments were executed:

- An amendment, submitted to all contractors for signing in 1974 which realigns and clarifies the surplus water provisions, was executed by San Luis Obispo County Flood Control and Water Conservation District and Ventura County Flood Control District.
- An amendment concerning calculation of the Delta Water Charge and the project interest rate was executed by the County of Butte. All contractors, except the City of Yuba City and the Solano County Flood Control and Water Conservation District, have now executed this amendment.

Amendments pending as of mid-January 1976 included the following:

- An amendment to the contract with the City of Yuba City concerning calculation of the Delta Water Charge and the project interest rate.
- An amendment to the contract with Solano County Flood Control and Water Conservation District concerning the calculation of the Delta Water Charge.
- An amendment to contracts with the City of Yuba City and Solano County Flood Control and Water Conservation District which deletes the surcharge, surcharge credit, and power credit provisions.
- Amendments to nine contracts to realign and clarify the surplus water provisions: Alameda County Water District, City of Yuba City, County of Butte, Mojave Water Agency, Napa County Flood Control and Water Conservation District, San Bernardino Valley Municipal Water District, San Gabriel Valley Municipal Water District, San Geronio Pass Water Agency, and The Metropolitan Water District of Southern California.

*Deferred Delivery Amendment.* As has been reported in previous bulletins of this series, the Department has been working with contractors to develop a contract amendment which would provide contractors the right to either later delivery of or a monetary credit for all entitlement water paid for but not taken. No work was done on the amendment during 1975

# Figure 7: WATER SUPPLY CONTRACT AMENDMENTS AS OF JANUARY 19, 1976

Contracting Agency	Minimum Project Yield Increased	Delta Water Charge, "Eel" Costs Delayed			Project Interest Rate Modified	Surcharge and Surcharge Credit Provisions						"Met Weather" Provisions Added	"A & R" Surplus Water Provisions		Turnout Construction by Agency	Peaking Service		Annual Entitlements Revised	Excess Capacity Purchased	Article 28 Revised	Special Conditions
		1970	1971	1972 till construction		Added	Revised	Moratorium Declared			Deleted		Added	Revised		Increased	Decreased				
								Thru 1969	1970	1971											
FEATHER RIVER AREA																					
City of Yuba City	1	2P	2P	2P	2P		1						1					1		NA	
County of Butte	1	3	3	3	3		1	2		4	5		1							NA	
Plumas County Flood Control and Water Conservation District	1	3	5	6	3		1	2	4	7	8		10							9	
NORTH BAY AREA																					
Napa County Flood Control and Water Conservation District	1	3	4	5	3		1				6		1								1,2
Solano County Flood Control and Water Conservation District	1	2	3P	3P	2		1						1,5		1						
SOUTH BAY AREA																					
Alameda County Flood Control and Water Conservation District, Zone 7	2	6	8	9	6	2		5	7	10	11	1	2,12	3				1,4			1
Alameda County Water District	1	4	5	7	4	1		3		8	9	S	1	2						10	1,6
Santa Clara Valley Water District	2	6	8	10	6	2		5	7	11	12	1	1,2,14	3				1,4		13	1,9
SAN JOAQUIN VALLEY AREA																					
County of Kings		2	3	4	2			1		5	6	S	S	8						7	
Devil's Den Water District	1	5	7	8	5			4	6	9	10		1,12					1,3		11	2
Dudley Ridge Water District	1	6	8	9	6			5	7	10	11		1,13					1,2,3,4		12	
Empire West Side Irrigation District	1	4	6	7	4			3	5	8	9	S	1,11					2		10	
Hacienda Water District	1	4	6	7	4			3	5	8	9	S	1,11					2		10	7
Kern County Water Agency	1	4	6	8	4			3	5	9	10		1,12					1,2		11	7
Oak Flat Water District		3	5	6	3			2	4	7	9	S	S	11	1			8		10	
Tulare Lake Basin Water Storage District	2	5	6	7	5			4		8	10	S	2,13					1,3,9,12		11	
CENTRAL COASTAL AREA																					
San Luis Obispo County Flood Control and Water Conservation District	2	3	4	5	3	1	2				6		1	2,8						7	
Santa Barbara County Flood Control and Water Conservation District	2	3	4	5	3	1	2				6		1	2,7				2			
SOUTHERN CALIFORNIA AREA																					
Antelope Valley-East Kern Water Agency	1	5	6	7	5	1					8		1	10		3	2	1	4	9	2,3,4
Castaic Lake Water Agency	2	4	5	6	4	1	2				7		1	2,10		2		2,3,9		8	
Coachella Valley County Water District	2	3	4	5	3	1	2				6		1	2,8				2		7	
Crestline-Lake Arrowhead Water Agency	2	5	6	7	5	1	2				8		1	2,11	4	3		2,10		9	
Desert Water Agency	2	3	4	5	3	1	2				6		1	2,8				2		7	
Littlerock Creek Irrigation District	2	3	4	5	3	1	2				6		1	2,7				2			
Mojave Water Agency	2	4	5	6	4	1	2				7		1	2		3		2		8	3
Palmdale Water District	2	3	4	5	3	1	2				6		1	2,8				2		7	
San Bernardino Valley Municipal Water District	2	4	5	6	4	1	2				7		1	2				1,2,3,9		8	
San Gabriel Valley Municipal Water District	2	4	5	6	4	1	2				7		1	2		2		2,9	3	8	
San Geronio Pass Water Agency	2	4	5	6	4	1	2				7		1	2		2					2,3
The Metropolitan Water District of Southern California	1	9	10	11	9	1					13		1					1,3,8V,15	2,6,7	14	(a)
Ventura County Flood Control District	1	2	3	4	2		1				5		1,7							6	

and none is contemplated until after the Department's task force, which was given the assignment of reviewing the State Water Project water management program, has submitted its report (see Water Service Contractors Council Memo No. 985 dated August 21, 1976).

### ***Negotiation of Water Charge Settlements***

A task force consisting of representatives of the State Water Contractors Audit Committee, The Metropolitan Water District of Southern California, and the Department's Water Service Contract Cost Negotiation Committee continued its discussions and negotiations during 1975.

*Protests of Prior Year Charges.* Agreement was reached on the settlement of protested 1971 and 1972 planning program costs. A letter setting forth the proposed agreement was sent to each of the long-term contractors on November 26, 1975. By the end of the year, the settlement letter had been approved by 18 contractors.

Several issues concerning contractors' water service charges have not yet been resolved. Therefore, Water Service Contractors Council Memo No. 1007, November 18, 1975, was issued to notify contractors they would have until December 21, 1976, to file notices of contest and to pursue all remedies available to them on statements of charges submitted prior to such date excepting those charges covered by the eight settlement letters and the concurrence letter previously issued.

The Department is implementing new procedures to minimize the extent of protests on costs incurred after 1976 (see next section on 1976-77 Budget Review).

*Allocation of Power Costs.* Another issue with which the task force has long concerned itself is the allocation of power costs to applicable contractors. No progress was made during 1975 toward resolution of the differences of opinion which exist concerning the allocation methods now being used.

*Project Purpose Cost Allocations.* By Water Service Contractors Council Memo No. 831, July 6, 1973, the contractors were notified of the Department's intention to study five alternative project purpose cost allocations for the transportation facilities, using the Separable Costs-Remaining Benefits method.

Department representatives made a presentation on September 18, 1975, to acquaint the task force with details and progress of the study. Because of the technical and complex nature of the cost allocation process, the task force established a subcommittee to work with the Department during the study of the alternative allocations for the transportation facilities. Two subcommittee meetings were held late in 1975 to discuss the criteria to be used in the study.

The Department expects to meet periodically with the subcommittee in 1976 to finalize the criteria and review the resulting allocations.

### ***1976-77 Budget Review***

In October 1975 the Department met with the water contractors to review proposed State Water Project expenditures for 1976-77. Subsequently, the Department's 1976-77 budget for the State Water Project was formally presented to the contractors through the California Water Commission for review and comment. This is done annually in accordance with procedures established in 1968 for the purpose of reducing the number of cost items which might be contested by the contractors (see pages 27-28, Bulletin 132-69).

The Commission urged the Department to continue its efforts to clarify the progress being made in the disposal of excess lands and the staffing level of the right-of-way programs. The Department's management review of the budget level and the activities in the Graphic Services Branch, which is a continuing concern to the water contractors, was endorsed by the Commission. The Department's efforts to assure reliable sources of energy at the least possible cost were supported.

With regard to programs funded jointly by the Project and the General Fund, the Commission concurred with the Director's assurance to the water contractors that the practice of post-facto negotiation of protested capital costs will be continued as in the past. Although the practice of post-facto negotiations will continue for costs incurred through 1976, the Department is implementing procedures to provide sufficiently detailed information during the budget review process so that the extent of protests on prior year activities, after 1976, can be minimized.

### ***Power Contracts Management***

The historical and projected annual energy requirements by project pumping plants and generation by project recovery plants (excluding Hyatt-Thermalito power production) are shown in Table 4. These requirements are based on entitlement water delivery requests submitted by the water contractors on September 1, 1975, and do not reflect any allowance for reductions due to conservation, reclamation, or increased power costs.

As shown in Table 4 a total energy requirement of about 13 billion kilowatthours per year is presently projected for ultimate project water deliveries. About 30 percent of the energy requirements will be met from aqueduct recovery generation. The remaining energy requirements will be obtained from other sources.

For the years 1976 through 1982, it is expected that about one-fourth of the annual project energy requirements will be met from project recovery generation. The remainder will be obtained from the California Suppliers—Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas and Electric Company (SDG&E), and Los Angeles Department of Water

TABLE 4: ANNUAL PROJECT ENERGY

(in millions of

Calendar Year	Energy											
	North Bay Aqueduct Pumping Plants		Delta Facilities Pumping Plant	South Bay Aqueduct Pumping Plants (b)	California Aqueduct							
					Delta	San Luis	Dos Amigos	Buena Vista	Wheeler Ridge	Wind Gap	A. D. Edmonston (Tehachapi)	Pear-blossom
	Calhoun and Travis	Cordelia (a)										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Subtotal, Actual for 14 years, 1962-1975 <sup>(a)</sup>	0	16	0	821	2,665	937	916	685	584	1,225	4,285	399
1976	0	4	0	108	442	134	194	218	240	479	1,694	204
1977	0	3	0	115	492	77	216	265	295	592	2,101	479
1978	0	3	0	117	518	88	235	288	321	648	2,278	505
1979	0	3	0	119	658	186	249	303	336	680	2,374	546
1980	0	4	0	121	598	118	259	310	343	694	2,410	541
1981	2	4	0	122	680	167	275	328	359	727	2,525	570
1982	2	4	0	124	656	142	286	335	364	737	2,563	551
1983	2	4	0	126	787	221	304	357	382	775	2,687	561
1984	3	5	0	128	770	144	335	401	429	873	3,037	600
1985	3	6	45	130	804	191	351	418	444	905	3,146	577
10 years, 1976-1985	12	40	45	1,210	6,405	1,468	2,704	3,223	3,513	7,110	24,815	5,134
10 years, 1986-1995	68	68	566	1,450	10,513	2,880	4,403	5,324	5,607	11,503	40,079	6,121
10 years, 1996-2005	90	91	646	1,613	12,210	2,979	5,133	6,536	6,960	14,359	50,356	6,170
10 years, 2006-2015	100	114	677	1,657	12,855	2,980	5,418	7,042	7,542	15,587	54,801	6,206
10 years, 2016-2025	117	152	690	1,660	13,098	2,915	5,519	7,230	7,759	16,047	56,467	6,230
10 years 2026-2035	120	160	690	1,660	13,100	2,890	5,520	7,230	7,760	16,050	56,480	6,240

a) During 1968 thru 1980, an interim pumping plant will pump from the federal Solano Project terminal reservoir.

b) Includes South Bay and Del Valle Pumping Plants and, during 1962 thru 1967, an interim pumping plant which pumped a supply provided by the federal Delta Mendota Canal.



# REQUIREMENTS FOR PUMPING

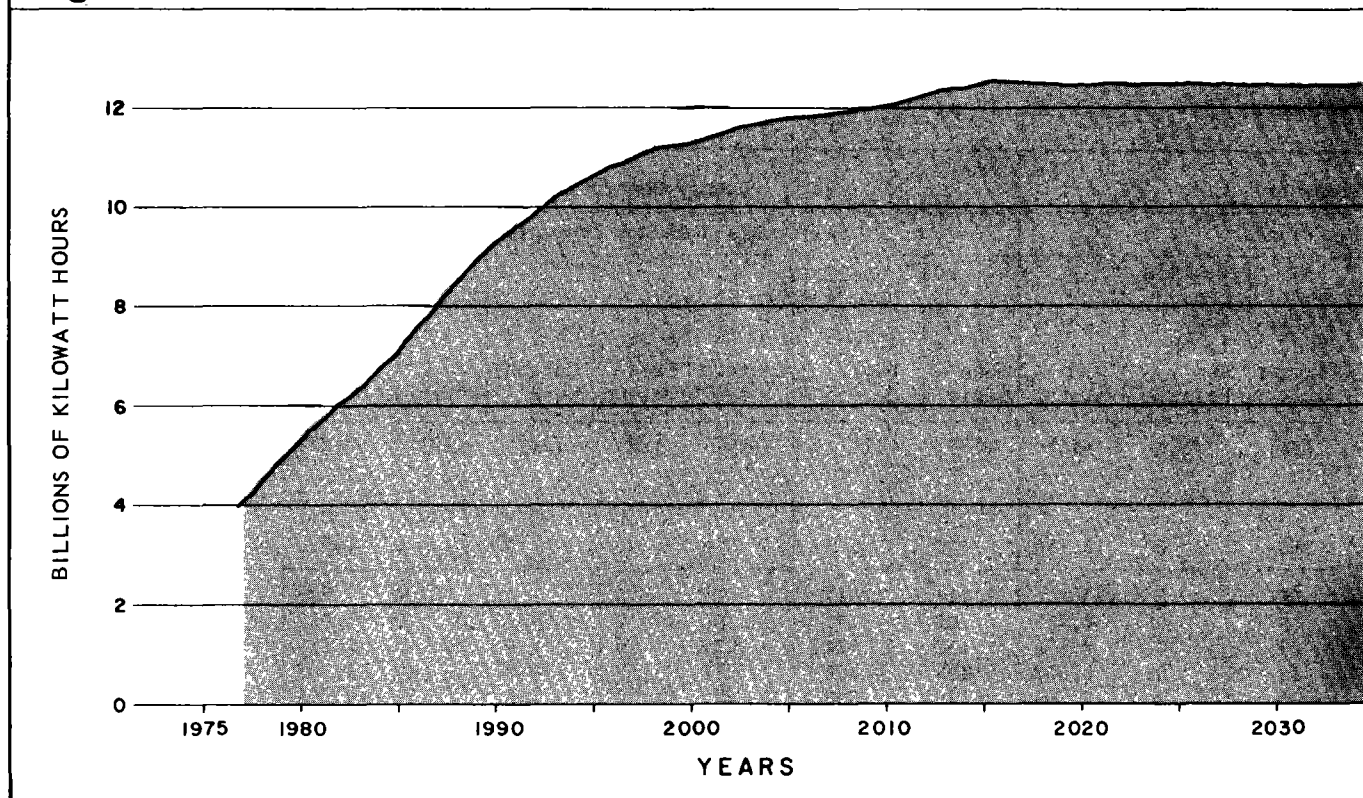
kilowatthours)

Requirements				Energy Generation							Net Energy Require- ments	Calendar Year
Pumping Plants				California Aqueduct Powerplants								
Oso	Las Per- illas and Badger Hill	Devil's Den, Saw- tooth and Polonio	Total	San Luis	Devil Canyon	Castaic (c	San Luis Obispo	Cotton- wood	Pyramid	Total	Col.(16) minus Col.(23)	
(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	
364	233	0	13,130	420	575	976	0	0	0	1,971	11,159	14 years, 1962-1975
124	25	0	3,866	114	317	406	0	0	0	837	3,029	1976
62	28	0	4,725	102	787	196	0	0	0	1,085	3,640	1977
72	29	0	5,102	112	824	231	0	0	0	1,167	3,935	1978
66	32	0	5,552	118	858	211	0	0	0	1,187	4,365	1979
71	33	0	5,502	126	858	226	0	0	54	1,264	4,238	1980
71	35	0	5,865	130	892	227	0	34	146	1,429	4,436	1981
81	37	7	5,889	141	865	261	0	95	167	1,529	4,360	1982
99	33	28	6,366	142	870	320	5	95	203	1,635	4,731	1983
126	36	39	6,926	132	920	413	7	101	260	1,833	5,093	1984
147	39	55	7,261	167	897	481	10	98	303	1,956	5,305	1985
919	327	129	57,054	1,284	8,088	2,972	22	423	1,133	13,922	43,132	10 years, 1976-1985
2,378	506	1,340	92,806	1,837	9,340	7,810	262	1,069	4,919	25,237	67,569	10 years, 1986-1995
3,573	571	1,793	113,080	1,858	9,418	11,667	341	1,120	7,397	31,801	81,279	10 years, 1996-2005
4,116	580	1,920	121,595	1,838	9,094	13,374	360	1,130	8,526	34,322	87,273	10 years, 2006-2015
4,322	580	1,920	124,706	1,791	8,757	14,024	360	1,137	8,963	35,032	89,674	10 years, 2016-2025
4,320	580	1,920	124,720	1,780	8,770	14,020	360	1,140	8,960	35,030	89,690	10 years, 2026-2035

c) The City of Los Angeles Department of Water and Power constructed and operates a 1,250,000-kilowatt Castaic Powerplant and will supply the Project with electric power and energy equivalent to the generation from a 213,984-kilowatt powerplant the State originally had planned to construct.

d) 1974 and thereafter -- entitlement deliveries only.

# Figure 8: PROJECTED PUMPING ENERGY REQUIREMENTS



and Power (LADWP)—and from Canadian Entitlement Power (CEP) in the Pacific Northwest.

As of April 1, 1983, CEP will no longer be available and new power rates will apply under the Suppliers' Contract.

Following is a listing of the possible sources of electric energy for the State Water Project beginning in 1983 that are being investigated under the Department's Long-Range Power Program.

Purchased power from the California Suppliers (PG&E, SCE, SDG&E, LADWP).

- Additional project recovery plants—Pyramid, Cottonwood, San Luis Obispo.

Withdrawal of Hyatt-Thermalito power for project use.

Bonneville Power Administration surplus energy.

- Nonproject hydroelectric power potential in California.

Power from the Pacific Northwest.

Thermal plants in California:

- Nuclear
- Oil and gas
- Coal
- Geothermal

Coal-fired plants in neighboring states.

- Wind, solar, tidal, etc.

Highlights of department activities under the Long-Range Power Program in 1975 included:

- Maintenance of liaison with LADWP which was preparing the draft of the Environmental Impact Report (EIR) for the San Joaquin Nuclear Project. A supplement to the initial draft EIR should be completed early in 1976 and a final draft EIR should be issued by the middle of the year. The Department is considering participation in the proposed 5,200 MW plant to the extent of 10 percent or 520 MW.
- Initiation of negotiations on an agreement for Planning and Feasibility Studies with SDG&E on its proposed Sundesert Nuclear Project. The Department's share of this proposed 1,900 MW plant would be 15 percent or 285 MW.
- Issuance of a letter to SCE on October 6, expressing an interest in obtaining a portion of the Kaiparowitz Power Project. This proposed project consisted of a 3,000 MW coal-fired electric generating plant located in southern Utah near Lake Powell. The maximum interest expressed by the Department in this plant is 300 MW. However, SCE, the project manager, decided to abandon the project because of environmental problems and cost increases.
- Initiation of activities to obtain permits for geothermal energy prospecting on state-owned lands in known geothermal areas including The Geysers and Imperial Valley. If adequate geothermal reservoirs can be found, the Department may construct steam

electric plants of suitable capacity. Discussions were also initiated with oil companies for the purchase of developed geothermal steam supplies.

Execution of a contract in May for development of methods to treat agricultural waste water to enable it to be used for power plant cooling. The contract is with the University of California. Participating with the Department in the contract as cosponsors are the Electric Power Research Institute, PG&E, LADWP, and SCE. Tests will be conducted and a pilot plant assembled by the University at its Richmond Sea Water Conversion Laboratory. Later the pilot plant will be moved to the Department's Waste Water Treatment Evaluation Facility at Firebaugh, where the Department will run the plant for a full 12-month irrigation period to obtain design and cost data for a full-scale facility capable of cooling large power plants.

A continuation of studies of possible future sources of electric power for the State Water Project and preparation of an Environmental Impact Report (EIR) on the Department's Long-Range Power Program.

Participation as a member of the Western Systems Coordinating Council. The Council provides information on the coordinated operation of over 40 electric utility systems in western United States and Canada, on the utilities' long-range construction pro-

grams, and on future power sources and transmission facilities.

- Initiation of negotiations with the California Suppliers to develop the power rates that will become effective on April 1, 1983 and, in addition, integration and transmission arrangements for future state-owned thermal plants.
- A continuation of the study of the possible withdrawal of Hyatt-Thermalito power for supplying part of the future requirements of the project pumping plants.
- A discussion with several utilities in the Pacific Northwest to explore the various possibilities of obtaining energy from the Pacific Northwest after 1982. The Department has rights to 300,000 KW of transmission line capacity on the Pacific Northwest—Southwest Extra High Voltage Transmission Intertie System. Northwest power would be transmitted into California utilizing the Department's 300 MW of transmission line capacity.
- Investigations of the feasibility of developing the nonproject hydroelectric potential existing at many sites throughout California to help meet part of the energy needs of the Project.
- Initiation of discussions with coal producers to assess the feasibility of obtaining an interest in coal leases in the intermountain region.



Geothermal Field



Castaic Powerplant

## **CHAPTER IV. PROJECT OPERATIONS, PROJECT VISITOR USE, AND RECREATION AND FISH AND WILDLIFE ACTIVITIES**

### **Project Operations**

#### ***Water Conditions***

The 1974-75 water year (October 1, 1974, through September 30, 1975) was a "good" water year. Precipitation was typical of most years and distributed in a characteristic pattern from just below normal south of the Tehachapi Mountains to slightly above normal for the rest of the State. The late season storms in March and April enabled the Project to meet all delivery requests in 1975, conduct a fish test during the summer, and refill Oroville Reservoir which had been drawn down for repair of the trash-racks.

Below-normal precipitation in November and December 1975 and January 1976 resulted in below-normal runoff forecasts for the 1975-76 water year as shown in the February 1, 1976, Bulletin No. 120-76, "Water Conditions in California".

Details of water supply conditions during the 1974-75 water year are available in DWR Bulletin No. 120-75, Summary, "Water Conditions in California".

#### ***Water Conservation***

In 1975 the Department developed and began implementing a water conservation program. Several of the actions being implemented are:

Deactivation of the reflecting pools and fountains at the Operations and Maintenance Centers which will eliminate evaporation losses.

Installation of water-conserving shower heads in the showers at all project facilities.

Adjustments to toilets and urinals for minimum water usage compatible with their intended purpose.

- Installation of drip irrigation systems in landscaped areas where practical. Future installations will also make use of drip irrigation whenever it is compatible with the type of landscape plantings.

A survey of the losses associated with water deliveries was performed in 1975. The results of this survey will be used to initiate appropriate actions to minimize operational losses on the Project.

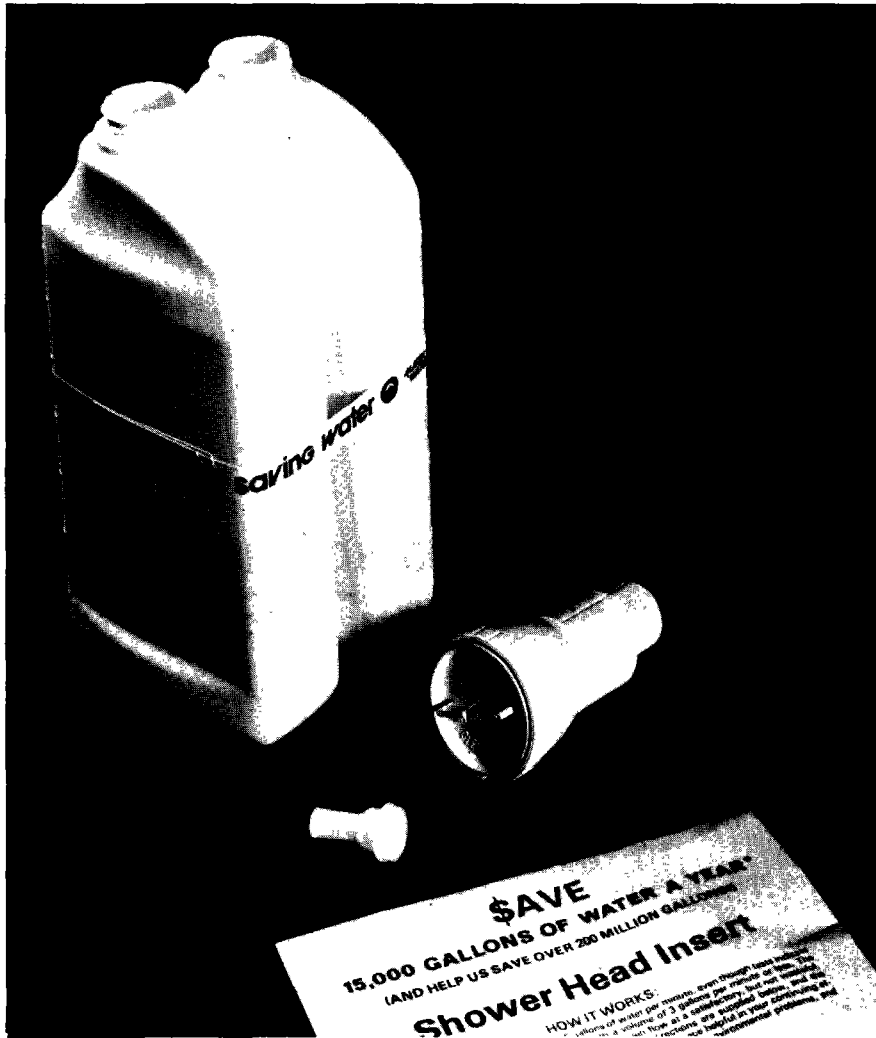
In addition to the water conservation program of the Department's facilities, a program to encourage departmental employees to implement water conservation programs in their own homes was initiated. Kits containing various water-saving devices for the home will be made available to employees at a nominal cost.

#### ***Water Deliveries***

During 1975, water deliveries to state water contractors totaled 2 357 406 cubic dekameters (1,911,152 acre-feet). This is a 43 percent increase over deliveries made in 1974. The year 1975 was the fourth consecutive year that state water contractors have received over one million acre-feet from the Project.

Water deliveries to U. S. Bureau of Reclamation customers from the joint facilities exceeded one million acre-feet for the second time in project history. The Bureau's 1975 water deliveries were 1 679 500 cubic dekameters (1,361,573 acre-feet) up 21 percent over 1974 deliveries.

Water deliveries to project water contractors in all service areas during 1975 were above those made in 1974.



Water Conservation Kit  
for the Home



Application of Drip Irrigation Method

## Other Activities

A program was undertaken to complete an independent review of safety of project dams pursuant to Section 6056 of the California Water Code. Consultants Mr. Wendell E. Johnson, Dr. Jack W. Hilf, and Dr. Douglas D. Campbell were selected to serve on a three-man board for this program. The independent review of safety of Perris and Pyramid Dams will be completed in March 1976. A review of Castaic Dam is scheduled for the fall of 1976. The remaining project dams will be reviewed shortly thereafter.

Table 5 shows summary data on the quality of water delivered during 1975 as measured at selective stations. Also shown at the bottom of Table 5 are the corresponding monthly average objectives for maximum concentrations of constituents as set forth in long-term water contracts. (Note that the mineral analyses are based on one each month, while the objectives are stated in terms of average conditions within a month.)

Figure 9 presents a pictorial summary of project water operations during 1975. Also shown on Figure 9 is the areal extent of each of the Project's five field divisions which have the responsibility for operations and maintenance activities. Selected activities during 1975 within each field division are described in the following sections, together with maps of project facilities and water contracting agencies.

Table 3 (Chapter III) presents the monthly amounts of water delivered during 1975 to each contracting agency.

Project power operations for each generating plant, during each month of 1975, are summarized in Table 6.

## State Water Project Benefits through 1975

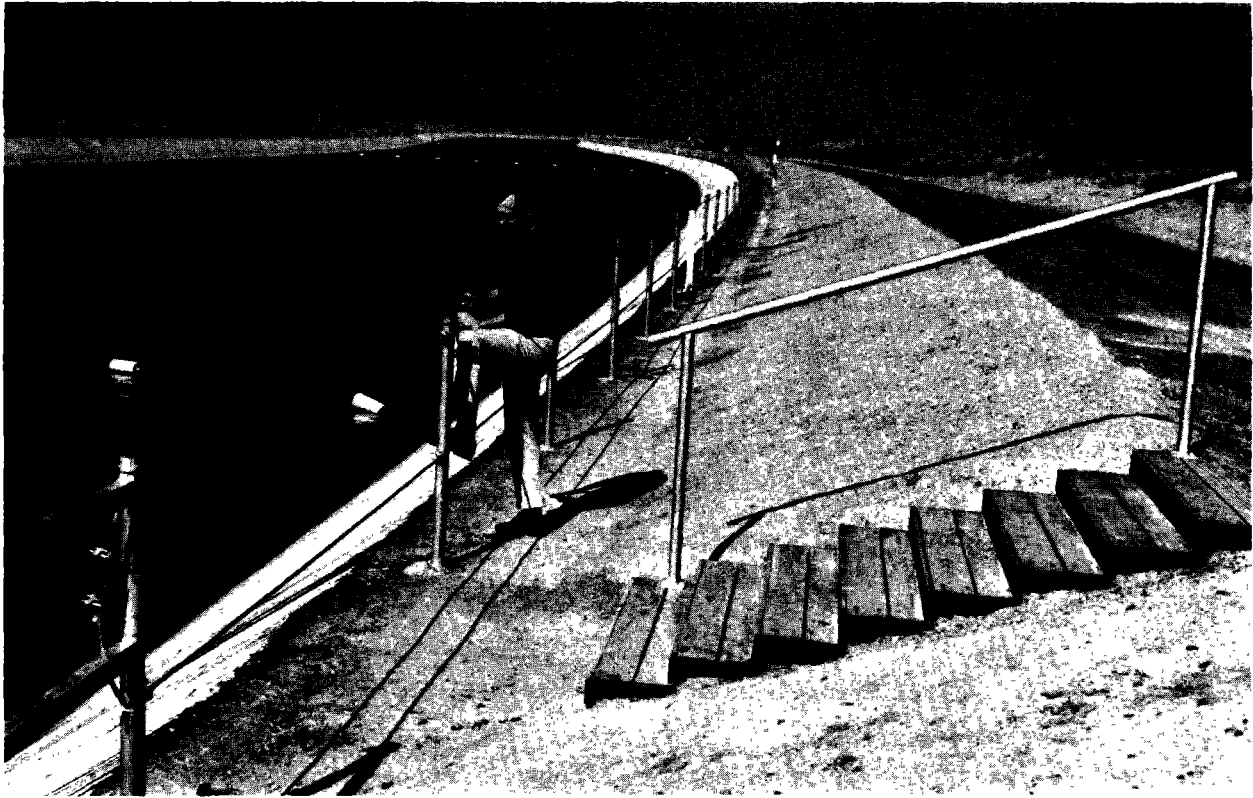
The quantitative benefits of project operations through 1975 are summarized in the tabulation below:

Year	Water Delivered (acre-feet) <sup>(a)</sup>			Recreation Supported (Recreation days) <sup>(b)</sup>	Electrical Energy Generated (megawatt-hours)
	Municipal and Industrial Use	Agricultural Use	Total		
1962	4,594	13,695	18,289	30,000	--
1963	6,686	15,770	22,456	105,000	--
1964	11,293	21,214	32,507	331,600	--
1965	17,642	26,463	44,105	499,800	--
1966	27,529	40,399	67,928	482,700	--
1967	28,736	36,407	65,143	455,200	--
1968	52,686	255,334	308,020	931,300	628,000
1969	40,123	244,123	284,246	1,554,800	2,614,000
1970	61,915	343,182	405,097	1,804,800	2,679,000
1971	103,550	593,928	697,478	2,085,900	3,302,000
1972	207,702	894,701	1,102,403	1,971,200	1,922,000
1973	309,144	724,243	1,033,387	2,502,000	3,298,000
1974	440,700	897,275	1,337,975	4,073,600	4,672,000
1975	689,941	1,221,211	1,911,152	4,189,300	3,159,000
TOTAL <sup>(c)</sup>	2,002,241	5,327,945	7,330,186	21,017,200	22,274,000

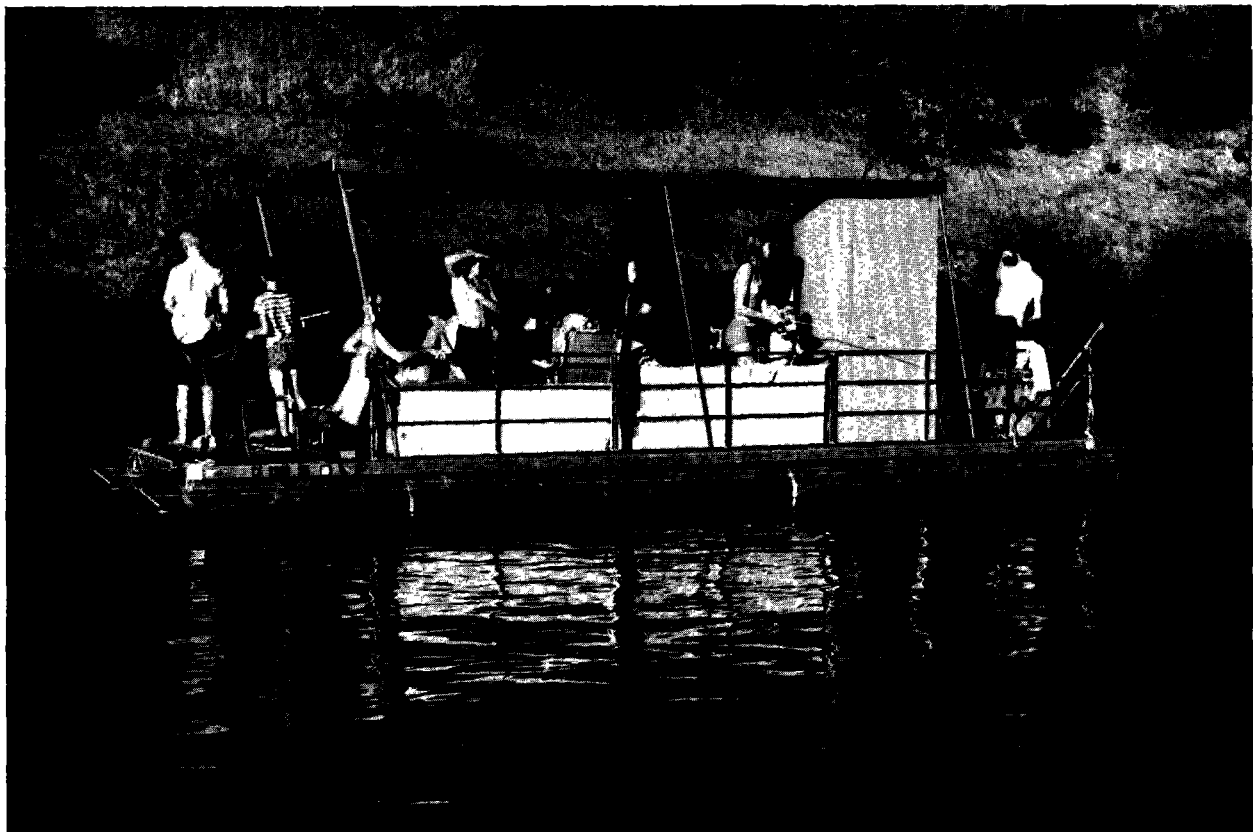
a) Metric conversion is acre-feet times 1.2335 equals cubic dekametres.

b) A recreation day is the visit of one person to a recreation area for any part of one day.

c) In addition, dams of the State Water Project have prevented millions of dollars worth of flood damage.



Fisherman at Cottonwood Fishing Access Site



Houseboating on Lake Oroville

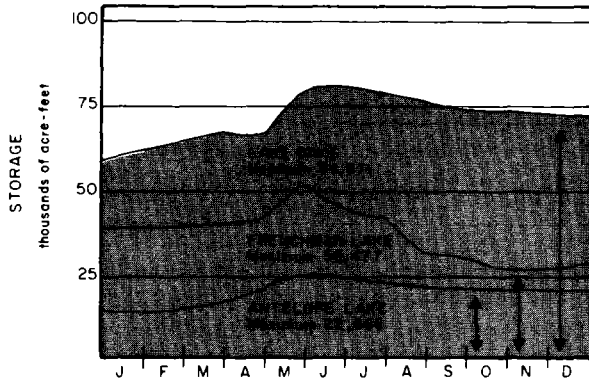


TABLE 5: WATER QUALITY MEASUREMENTS AT SELECTIVE STATIONS

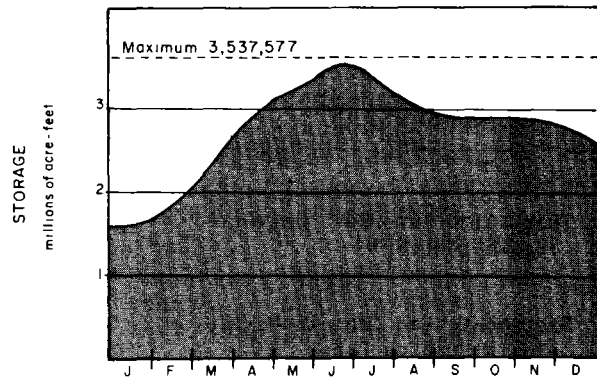
Station	Monthly Samples	Concentrations (in parts per million unless otherwise noted)					
		Total Dissolved Solids	Total Hardness	Chlorides	Sulfates	Sodium (%)	Boron
Thermalito Afterbay, Outlet to Feather River	Minimum	30	29	0	1	16	0.0
	Average	49	32	1	3	19	0.0
	Maximum	65	36	1	5	23	0.1
Sacramento-San Joaquin Delta, Delta Pumping Plant	Minimum	126	57	19	17	41	0.1
	Average	179	77	37	26	45	0.2
	Maximum	260	104	63	41	50	0.3
California Aqueduct:							
Entrance to O'Neill Forebay	Minimum	125	60	21	14	39	0.1
	Average	171	75	35	26	44	0.1
	Maximum	269	106	66	50	51	0.2
Outlet from O'Neill Forebay	Minimum	152	72	31	19	43	0.1
	Average	205	89	46	33	47	0.2
	Maximum	258	108	62	47	49	0.3
Near Kettleman City	Minimum	163	75	35	17	45	0.1
	Average	212	92	49	31	47	0.2
	Maximum	267	111	64	47	49	0.2
Coastal Branch near Devil's Den	Minimum	156	73	34	19	41	0.1
	Average	200	89	46	32	46	0.2
	Maximum	252	105	62	47	50	0.2
Near Buena Vista Pumping Plant	Minimum	154	69	26	21	41	0.1
	Average	218	93	45	39	45	0.2
	Maximum	293	113	67	61	50	0.3
At Tehachapi Afterbay	Minimum	126	71	26	19	42	0.1
	Average	209	93	46	40	47	0.2
	Maximum	281	113	63	59	52	0.3
At Pearblossom Pumping Plant	Minimum	133	71	29	20	42	0.0
	Average	215	94	48	40	47	0.2
	Maximum	271	118	68	60	52	0.3
Silverwood Lake Outlet to San Bernardino Tunnel	Minimum	169	87	36	28	44	0.1
	Average	203	96	47	36	47	0.2
	Maximum	261	109	57	54	49	0.2
Lake Perris, at outlet from Santa Ana Pipeline	Minimum	201	111	58	39	46	0.1
	Average	250	118	62	43	47	0.2
	Maximum	275	127	65	47	48	0.2
Pyramid Lake at entrance to Angeles Tunnel	Minimum	179	96	39	35	44	0.1
	Average	230	107	49	46	45	0.2
	Maximum	271	115	60	58	47	0.3
Castaic Lake, at Outlet Tower	Minimum	223	119	45	59	40	0.1
	Average	256	129	47	68	41	0.2
	Maximum	293	138	51	78	43	0.3
Monthly Average Quality Objectives		440	180	110	110	50	0.6

**Figure 9: SUMMARY OF PROJECT**

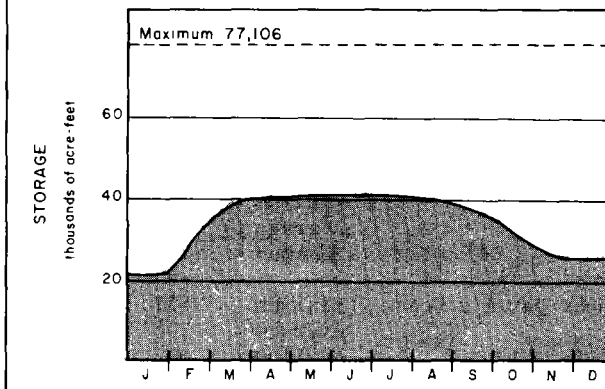
**UPPER FEATHER LAKES**



**LAKE OROVILLE**



**LAKE DEL VALLE**



**SAN LUIS FIELD DIVISION**

**DELTA FIELD DIVISION**

**1975 DELIVERIES (in acre-feet) FROM PROJECT FACILITIES**

- To State Water Project Customers →
- To Federal Central Valley Project Customers (San Luis) ↗
- Boundaries of Contracting Agencies Receiving Water in 1975

**SACRAMENTO**

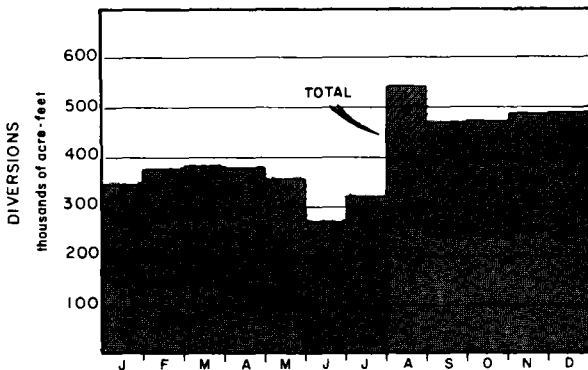
**TRACY PUMPING PLANT (FEDERAL)**

**DELTA PUMPING PLANT**

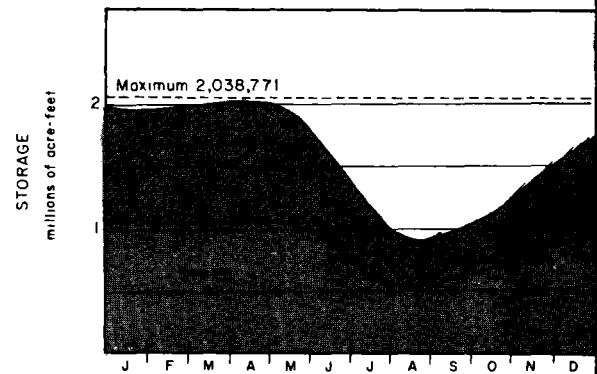
**LAKE DEL VALLE**

**SAN LUIS RESERVOIR**

**DIVERSIONS FROM SACRAMENTO-SAN JOAQUIN DELTA**



**SAN LUIS RESERVOIR**



\* INCLUDES DIVERSIONS FOR DELTA MENDOTA CANAL AND CONTRA COSTA CANAL

# WATER OPERATIONS, 1975

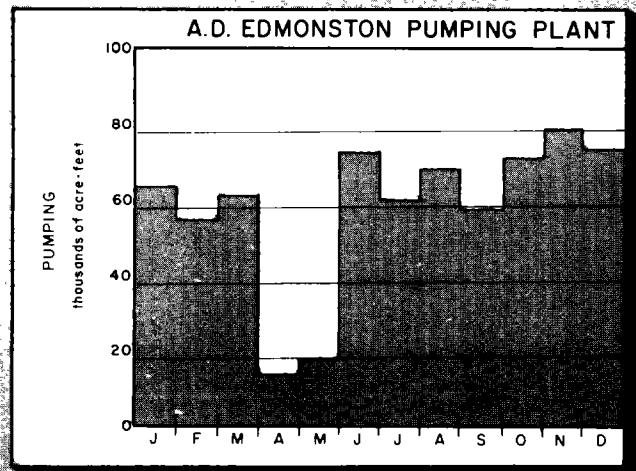
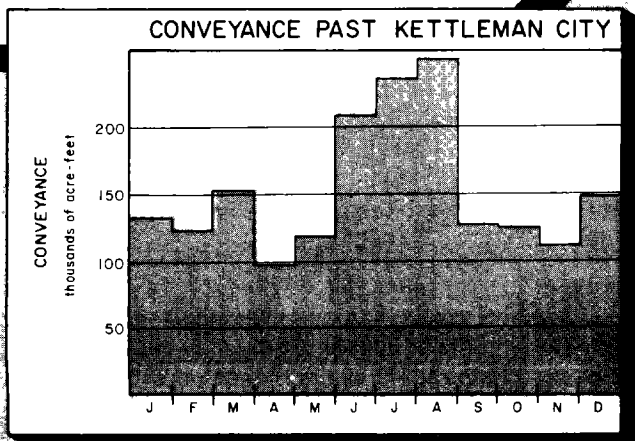
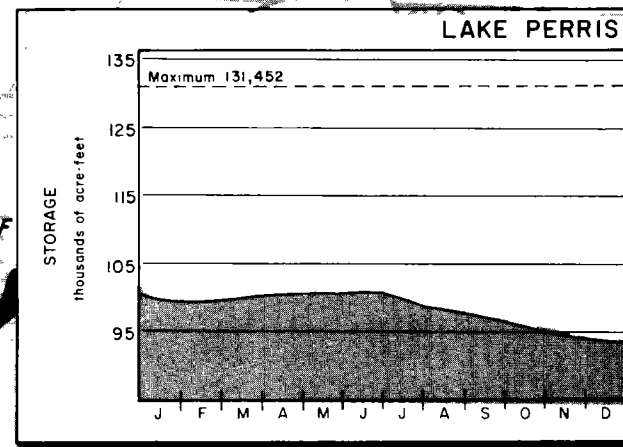
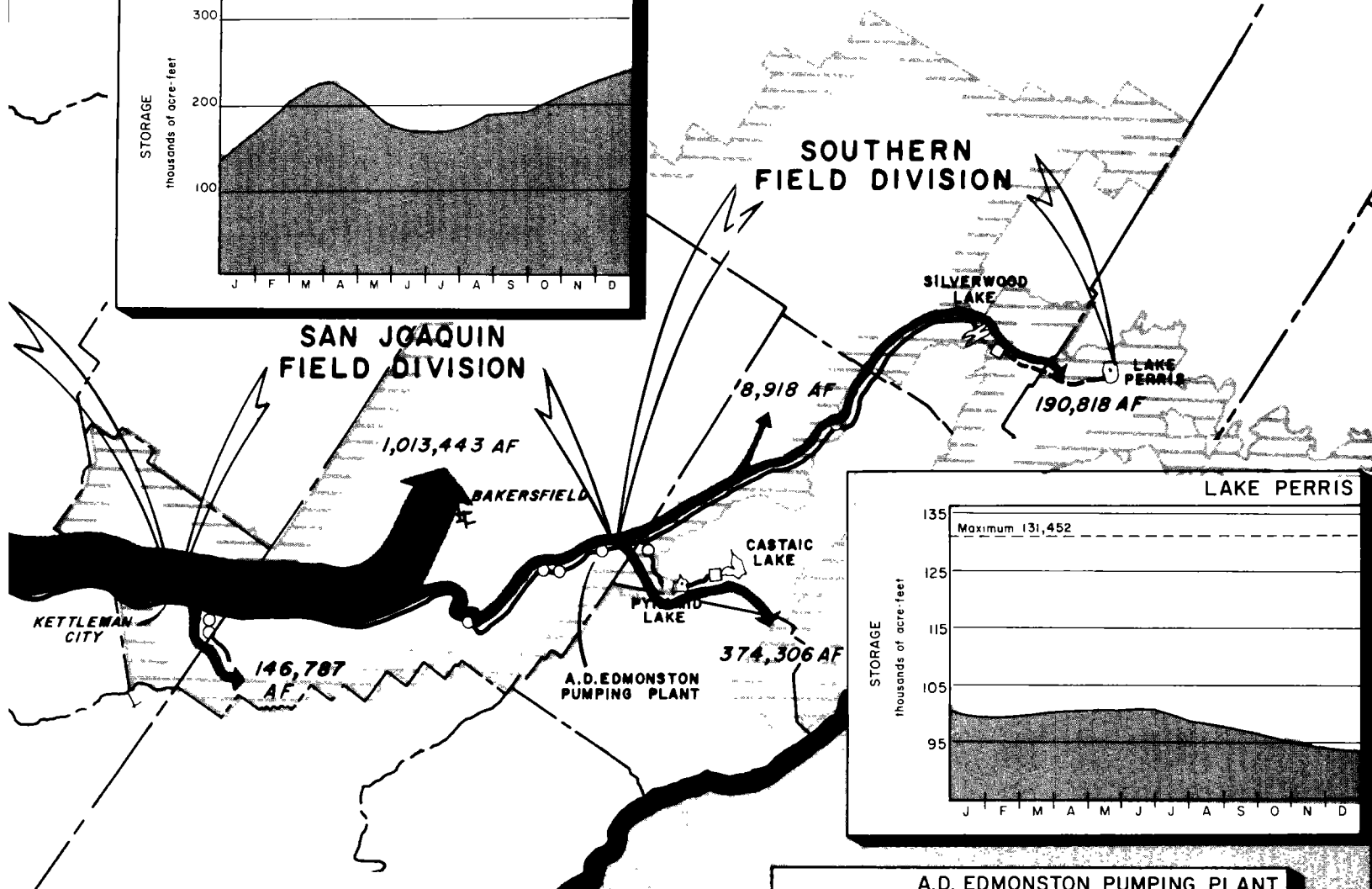
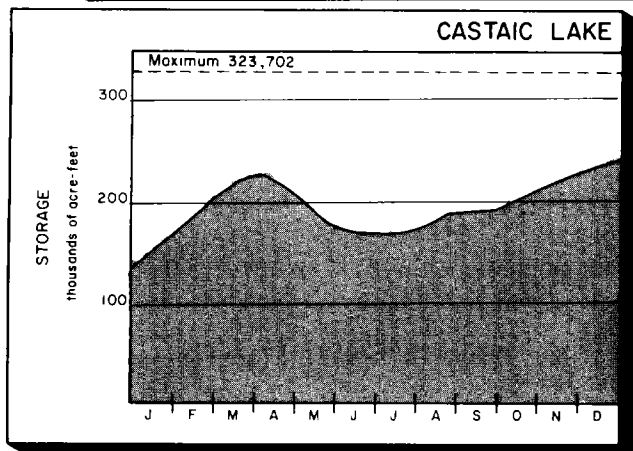
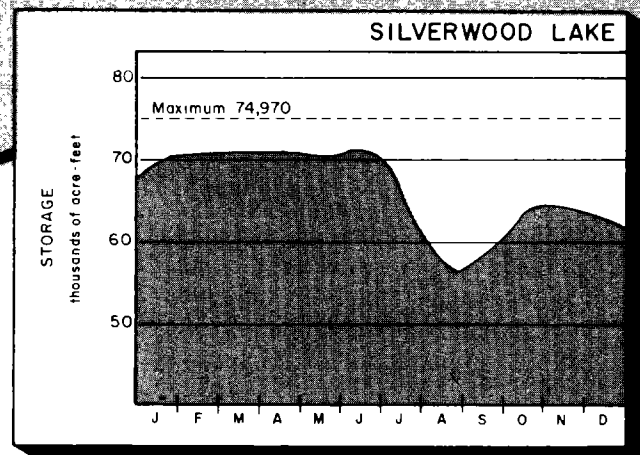
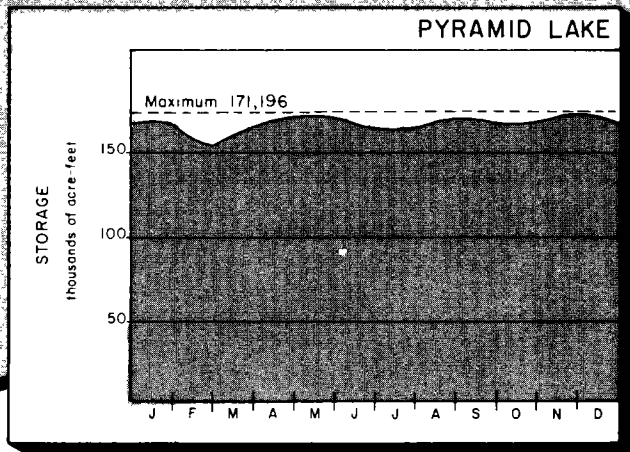


TABLE 6: MONTHLY POWER

(in millions of

Operations	Month						
	January	February	March	April	May	June	July
<b>ENERGY GENERATED BY EDWARD HYATT (OROVILLE) AND THERMALITO POWERPLANTS<sup>(a)</sup></b>							
Gross Generation	92.43	47.90	41.72	98.05	452.10	305.28	297.28
Powerplant Use and Pumpback Requirements	3.42	1.35	3.32	12.33	17.27	17.44	.37
Delivered to California Power Pool Companies	89.01	46.55	38.40	85.72	434.83	287.84	296.91
<b>ENERGY USED BY PROJECT PUMPING PLANTS</b>							
Cordelia (Interim)	.33	.29	.34	.37	.36	.19	.09
South Bay	7.95	8.80	2.98	3.54	9.32	10.80	12.54
Del Valle	.02	.37	.03	.02	.01	.01	.01
Tracy (State Share)	1.02	0	0	0	0	0	0
Delta	44.55	41.39	41.60	35.54	28.31	4.08	5.33
San Luis (State Share)	0	0	0	0	0	.01	0
Dos Amigos (State Share)	18.21	17.39	20.03	14.24	16.13	28.78	31.82
Las Perillas	.55	.84	.91	.91	1.28	1.45	1.91
Badger Hill	1.45	2.29	2.42	2.45	3.45	3.84	5.13
Buena Vista	18.74	18.02	20.26	6.90	10.36	26.27	24.51
Wheeler Ridge	18.82	15.90	17.92	4.91	6.95	22.57	19.45
Wind Gap	40.42	35.02	39.43	9.00	12.69	47.88	39.81
A. D. Edmonston (Tehachapi)	143.32	122.00	138.21	30.68	40.91	165.00	135.76
Oso	13.50	13.59	15.22	1.68	.93	11.87	12.49
Pearblossom	10.10	3.27	4.12	4.96	9.53	19.59	9.26
<b>Total</b>	<b>318.98</b>	<b>279.17</b>	<b>303.47</b>	<b>115.20</b>	<b>140.23</b>	<b>342.34</b>	<b>298.11</b>
<b>SOURCES OF ENERGY FOR PROJECT</b>							
San Luis Pumping-Generating Plant (State Share)	0	.15	0	.03	15.38	53.06	51.53
Castaic Generating Plant (State Share)	44.50	60.48	45.97	0	0	39.62	40.80
Devil Canyon Generating Plant	7.97	4.74	6.73	8.80	16.14	34.07	26.53
Canadian Entitlement Power	0	0	0	0	0	0	0
Bonneville Power Administration	0	0	0	0	0	0	0
California "Suppliers"	266.51	213.80	250.77	106.37	108.70	215.59	179.26
<b>Total</b>	<b>318.98</b>	<b>279.17</b>	<b>303.47</b>	<b>115.20</b>	<b>140.22</b>	<b>342.34</b>	<b>298.12</b>

a) Sold under terms of the Oroville-Thermalito Power Sale Contract, November 29, 1967.

# OPERATIONS IN 1975

kilowatthours)

Month						Operations
August	September	October	November	December	Total	
						ENERGY GENERATED BY EDWARD HYATT (OROVILLE) AND THERMALITO POWERPLANTS <sup>(a)</sup>
276.38	175.33	119.48	191.20	246.38	2,343.53	Gross Generation
.47	.66	.54	.52	.50	58.19	Powerplant Use and Pumpback Requirements
275.91	174.67	118.94	190.68	245.88	2,285.34	Delivered to California Power Pool Companies
						ENERGY USED BY PROJECT PUMPING PLANTS
.23	.30	.27	.36	.37	3.50	Cordelia (Interim)
11.82	8.04	4.39	7.71	10.34	98.23	South Bay
.01	.02	.01	.02	.01	.54	Del Valle
0	0	0	0	1.02	2.04	Tracy (State Share)
76.72	70.66	72.18	74.79	72.83	567.98	Delta
0	24.75	43.50	44.91	23.78	136.95	San Luis (State Share)
33.89	17.42	16.92	15.03	19.98	249.84	Dos Amigos (State Share)
1.77	.44	.41	.27	.48	11.22	Las Perillas
4.76	1.12	1.06	.68	1.28	29.93	Badger Hill
25.35	17.19	19.85	20.56	19.75	227.76	Buena Vista
21.63	17.28	21.36	22.83	21.98	211.60	Wheeler Ridge
46.34	37.37	47.47	50.90	47.94	454.27	Wind Gap
158.16	130.07	166.52	180.92	170.91	1,582.46	A. D. Edmonston (Tehachapi)
14.53	10.71	13.89	14.76	12.40	135.57	Oso
10.51	11.96	15.36	17.50	20.80	136.96	Pearblossom
405.72	347.33	423.19	451.24	423.87	3,848.85	Total
						SOURCES OF ENERGY FOR PROJECT
4.04	0	.04	0	0	124.23	San Luis Pumping-Generating Plant (State Share)
49.27	39.63	45.62	49.05	43.68	458.62	Castaic Generating Plant (State Share)
22.10	15.43	21.03	30.46	38.97	232.97	Devil Canyon Generating Plant
0	0	0	0	0	0	Canadian Entitlement Power
0	0	0	0	0	0	Bonneville Power Administration
330.31	292.27	356.50	371.73	341.22	3,033.03	California "Suppliers"
405.72	347.33	423.19	451.24	423.87	3,848.85	Total

## Oroville Flood Division

Antelope Lake spilled during the spring of 1975. Frenchman Lake filled to near maximum capacity of 62 007 cubic dekametres (50,269 acre-feet) in May and Lake Davis filled to near maximum capacity of 99 218 cubic dekametres (80,436 acre-feet) in June.

Lake Oroville filled to near maximum capacity of 4 300 000 cubic dekametres (3.5 million acre-feet) on June 24. The spring reservoir filling operation was constantly reviewed in light of short-term forecasts of runoff and water supply based on snow surveys to provide maximum utilization of inflow while maintaining flood control requirements. As a result, flow over the spillway was avoided.

Generation at the Hyatt-Thermalito (Oroville) complex during 1975 was 2,343,530 megawatthours. The maximum bihourly rate of inflow was 1 010 cubic metres per second (35,700 cubic feet per second) on February 13, 1975.

Minimum storage in Lake Oroville was 2 046 340 cubic dekametres (1,658,970 acre-feet) at Elevation 228 metres (748 feet) on January 2, 1975. This draw-down was required to allow repairs to Edward Hyatt (Oroville) Powerplant Intake trashracks. At the same time, boat ramps were extended at several locations around the reservoir.

Releases to satisfy prior water rights to Sutter Butte Canal, Pacific Gas and Electric Company Lateral, Western Canal, Richvale Canal, and Palermo Canal totaled 1 043 290 cubic dekametres (845,793 acre-feet) and reached a peak of 100.6 cubic metres per second (3,554 cubic feet per second) on May 10. Releases to the Feather River totaled 3 641 433 cubic dekametres (2,952,114 acre-feet) and reached a peak of 289.7 cubic metres per second (10,232 cubic feet per second) on May 13.

The surface water in Lake Oroville warmed to a high of 27°C (81°F) on July 26, 1975. Minimum temperature was 8°C (46°F) on January 16 and March 26.

A moderately strong seismic shock occurred on August 1, 1975, at 1320 Pacific Daylight Time with the epicenter near Palermo in Butte County. The Richter magnitude of the maximum event has been estimated by various seismologists at values ranging from 5.7 to 6.1. The maximum shock was preceded by several small shocks (including one of magnitude 4.7) earlier in the day and has been followed by numerous aftershocks. Figure 10A shows the location of the epicenters and the magnitudes of the seismic activity in the Oroville area.

Inspections by Department of Water Resources personnel commenced following the 3.6 magnitude foreshock occurring at 0845 Pacific Daylight Time and then were intensified immediately following the 5.7 magnitude maximum shock. Oroville Dam withstood the earthquake with no structural damage and no slides or sloughing occurred in the reservoir. Minor damage was observed on some of the facilities, but none affected their safety or operation. Those areas with minor damage have been repaired. However, both as a safety precaution and to take advantage of the tremendous amounts of seismic data accumulated as a result of the quakes, the Department has undertaken three detailed follow-up investigations, two involving outside consultants.

At a meeting of the Department's Consulting Board for Earthquake Analysis on August 8, 1975, the Board recommended augmentation of existing seismic instrumentation at Oroville and other Department dams, a repeat of geodetic surveys at Oroville, and reduction and publication of static and dynamic instrumentation data acquired from the earthquake. These recommendations are being implemented.

The Department is preparing a bulletin, which will document the seismic, geological, and structural investigations pertaining to the performance of the Oroville Project Facilities during the Oroville earthquake. This bulletin is expected to be issued in the latter part of 1976.

**Figure 10A OROVILLE EARTHQUAKE LOCATION  
AND MAGNITUDE OF EPICENTERS**  
28 June 1975 — 31 March 1976

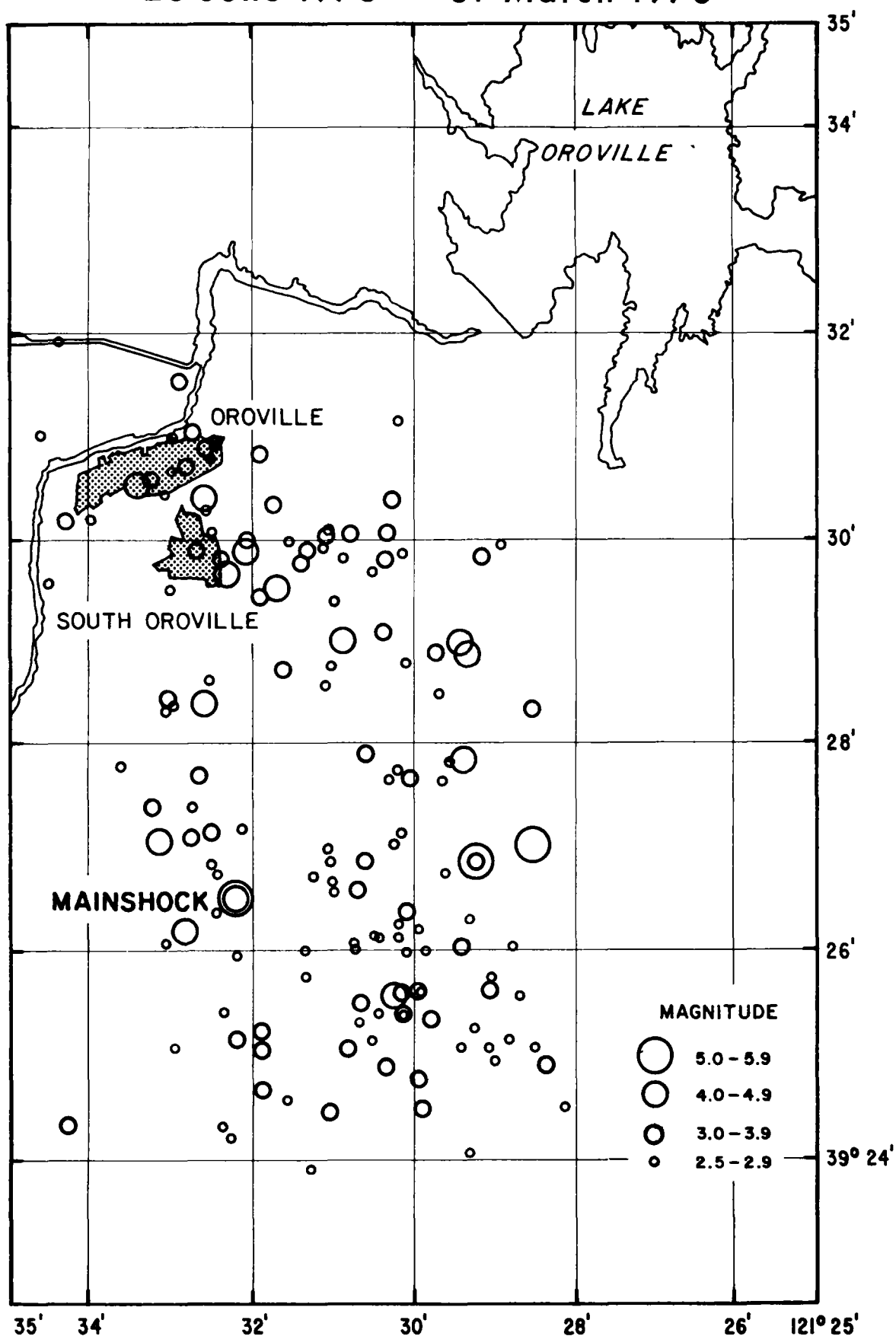
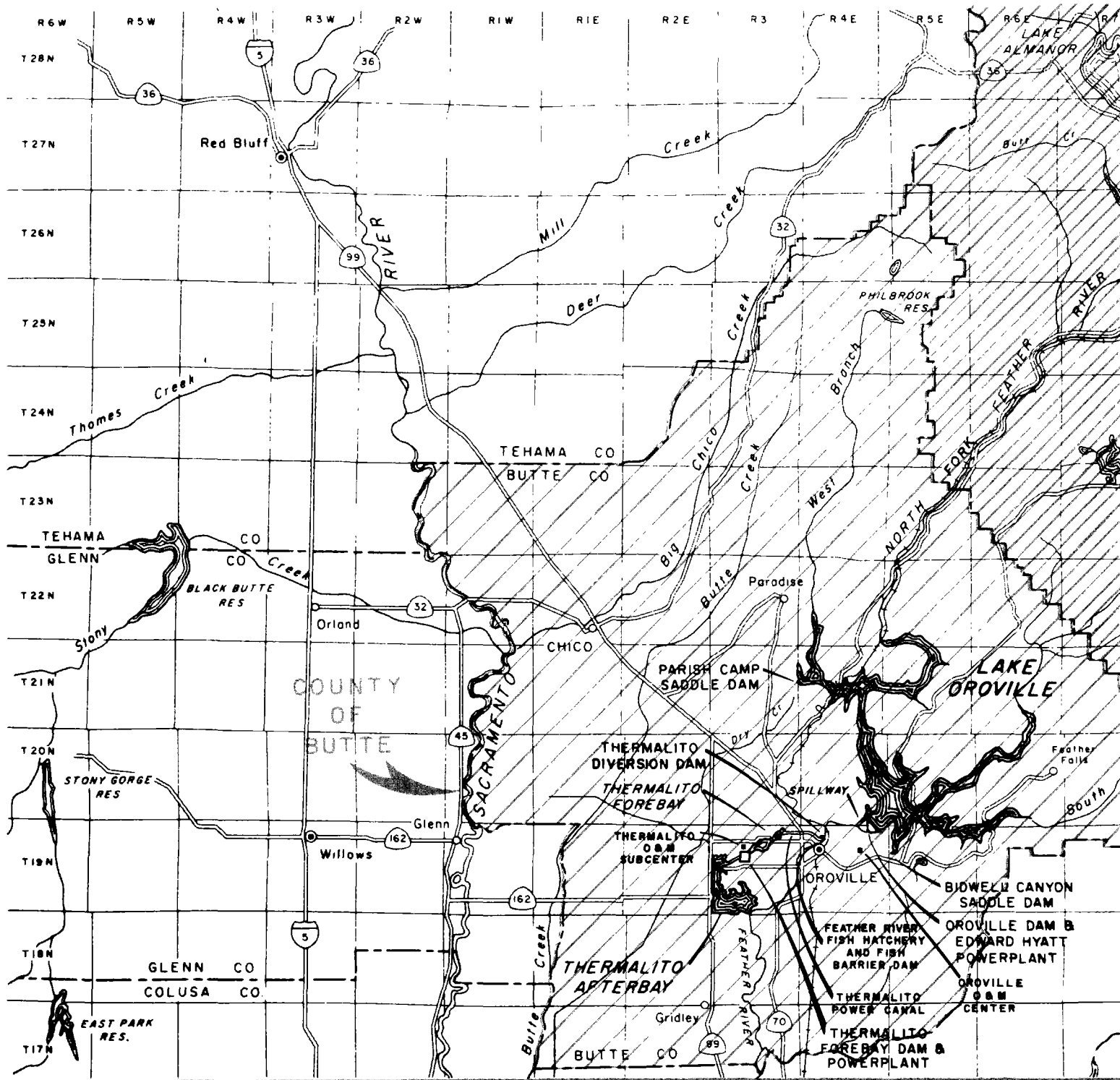
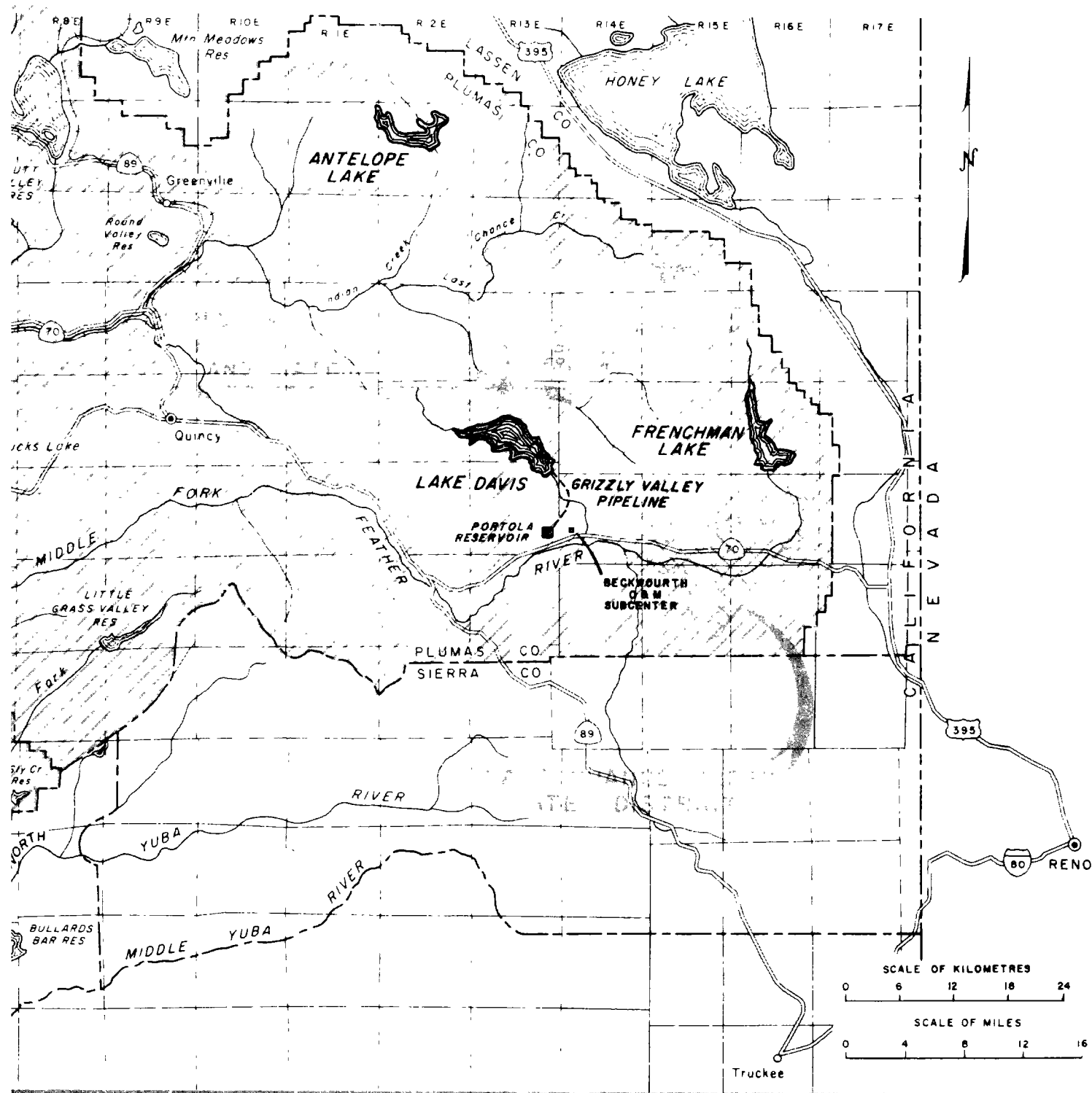


Figure 10: OROVILLE

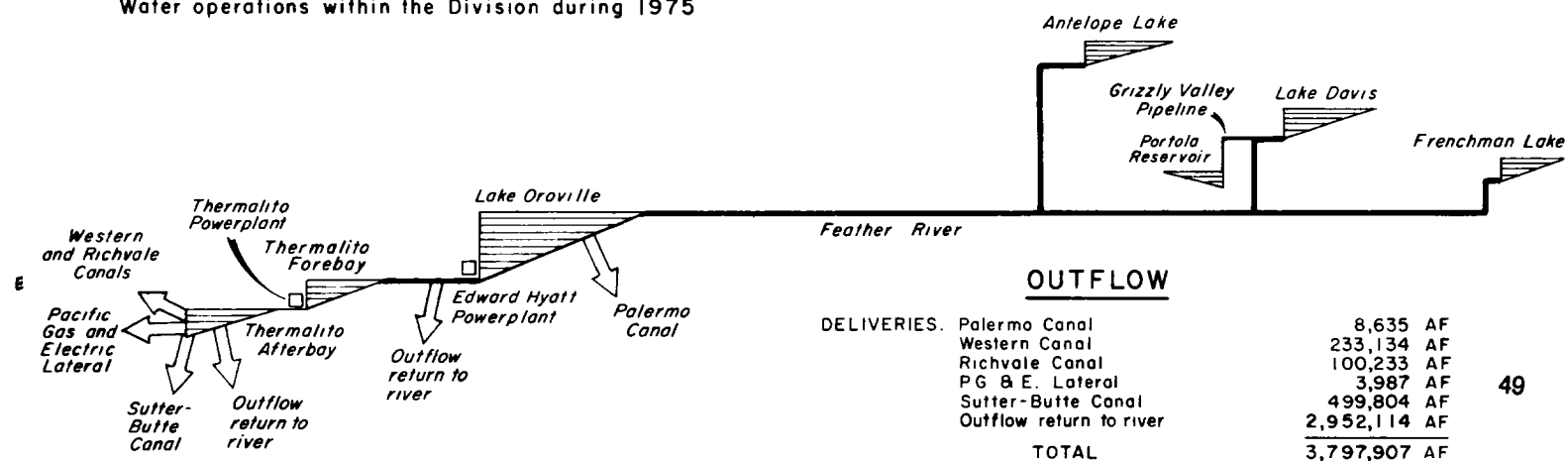


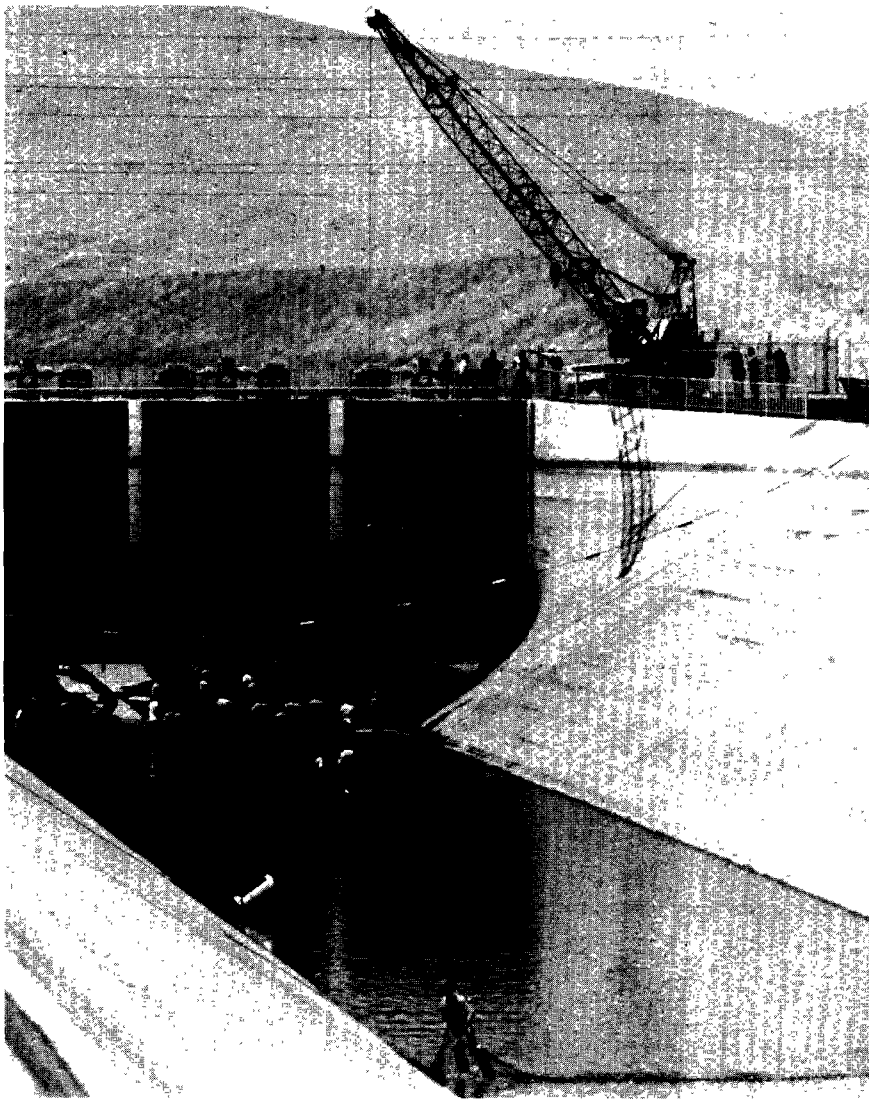


# FIELD DIVISION



Water operations within the Division during 1975





Fish Rescue Operation  
on California Aqueduct



## Delta Field Division

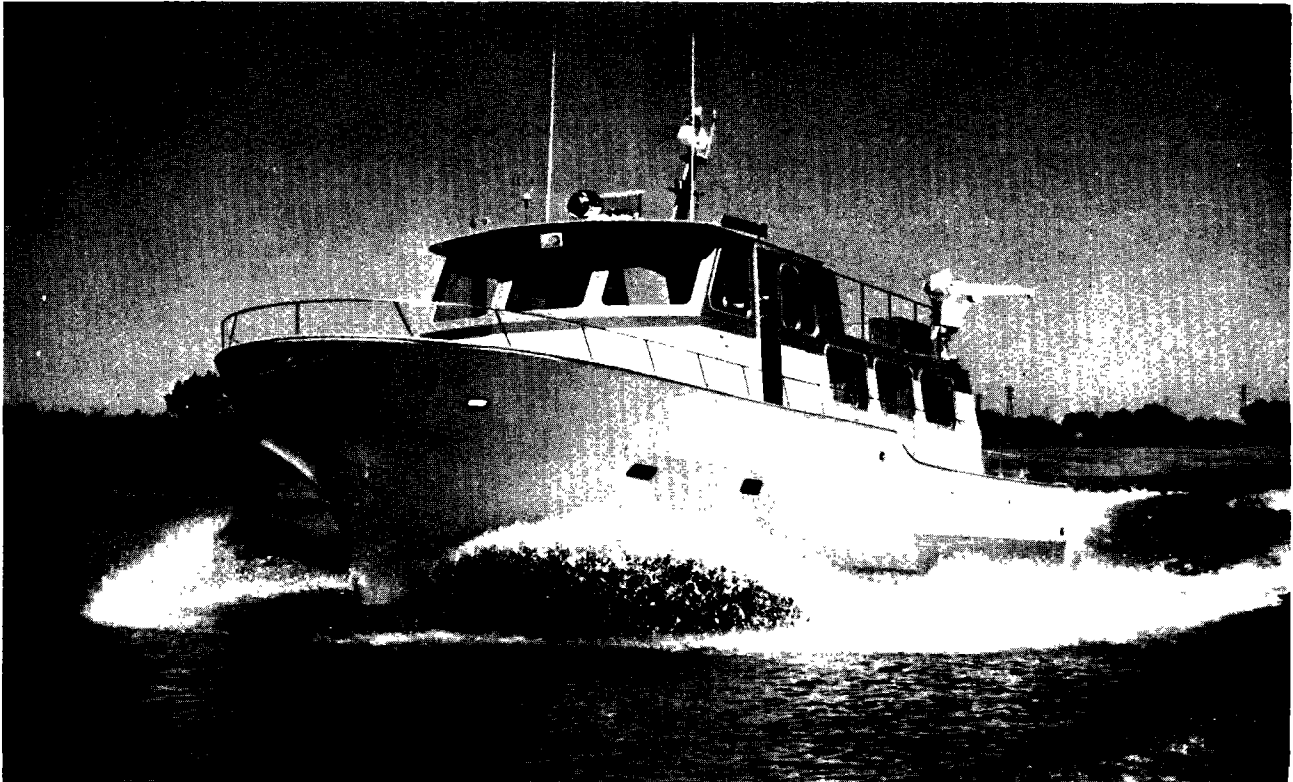
Water storage in Lake Del Valle on the South Bay Aqueduct on January 1, 1975, was 25 383 cubic dekametres (20,578 acre-feet). Local inflow raised the storage to a maximum of 51 754 cubic dekametres (41,957 acre-feet) on March 25. Storage above 49 340 cubic dekametres (40,000 acre-feet) is flood water and was released gradually through June 3. The annual drawdown started on September 15. Minimum storage for the year was 25 383 cubic dekametres (20,578 acre-feet) on January 1 and 2.

During the first part of January, while the Bureau's Delta Mendota Canal was still down for maintenance, 25 762 cubic dekametres (20,885 acre-feet) of Bureau water was pumped at the Delta Pumping Plant and delivered to O'Neill Forebay through the State's facilities. The Bureau provided the electrical energy for pumping this water at the Delta Pumping Plant. Discussions were initiated with the Bureau regarding the wheeling charge for future pumping of this type.

Again this year, the Bureau conveyed the Project's share of mitigation water, (releases necessitated by construction of dams on San Luis and Los Banos Creeks) 5 258 cubic dekametres (4,263 acre-feet), through its Delta Mendota Canal facilities. The Project furnished the electrical energy for pumping its share of mitigation water at the Tracy Pumping Plant. The Bureau's conveyance of all mitigation water through its facilities provides an overall saving to the two agencies.

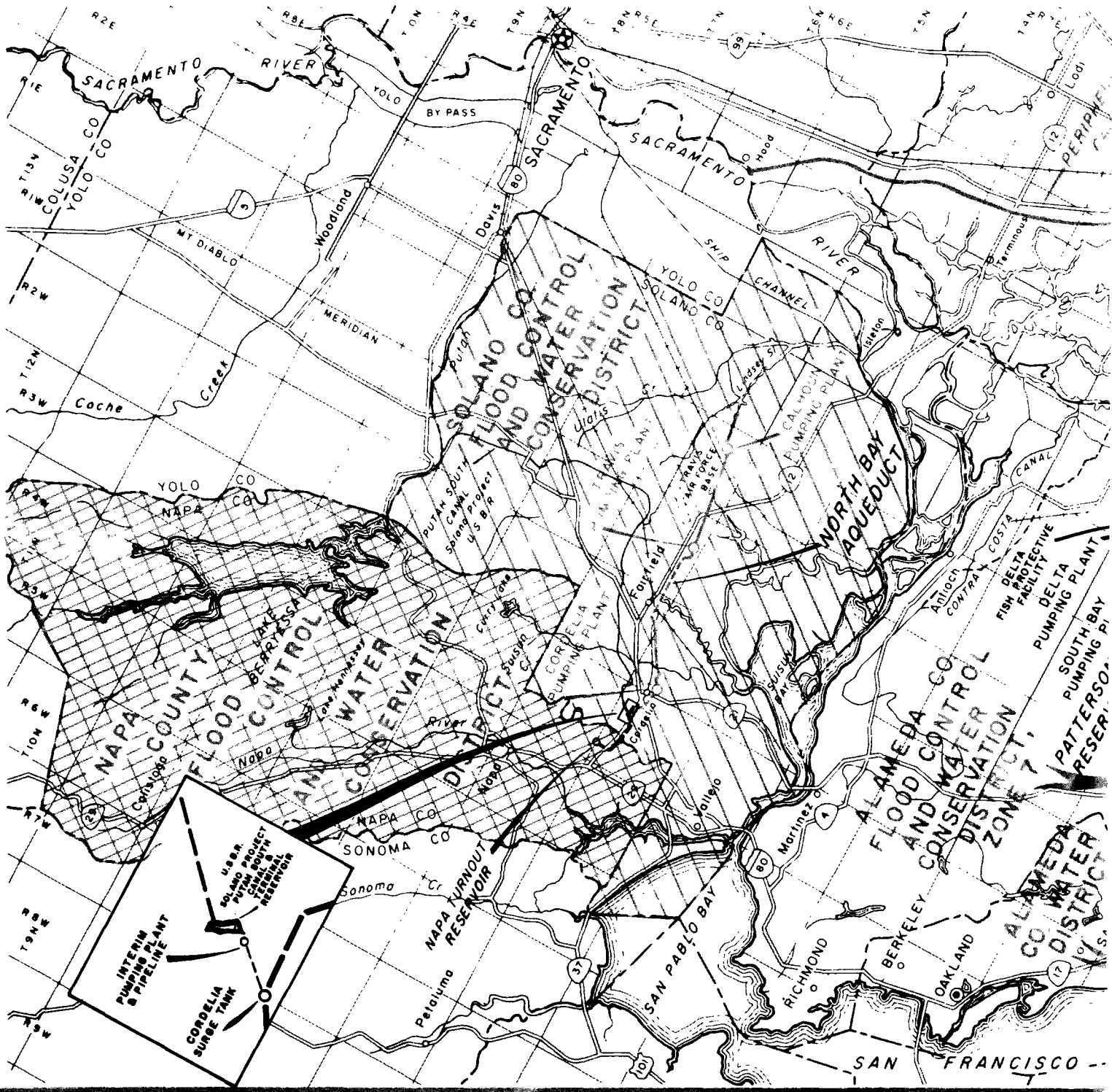
Between May 15 and August 1, pumping at the Delta Pumping Plant was limited to South Bay Aqueduct and North San Joaquin Division demands. The reduced pumping was a part of a Delta Fish Test to determine if a pre-State Water Project level of export would result in a significant increase in the survival rate of striped bass fingerlings.

From June 3 through August 1, California Aqueduct Pools 7 and 12 were dewatered for an examination of the lining and repairs. Normal operation was resumed on August 2, 1975.

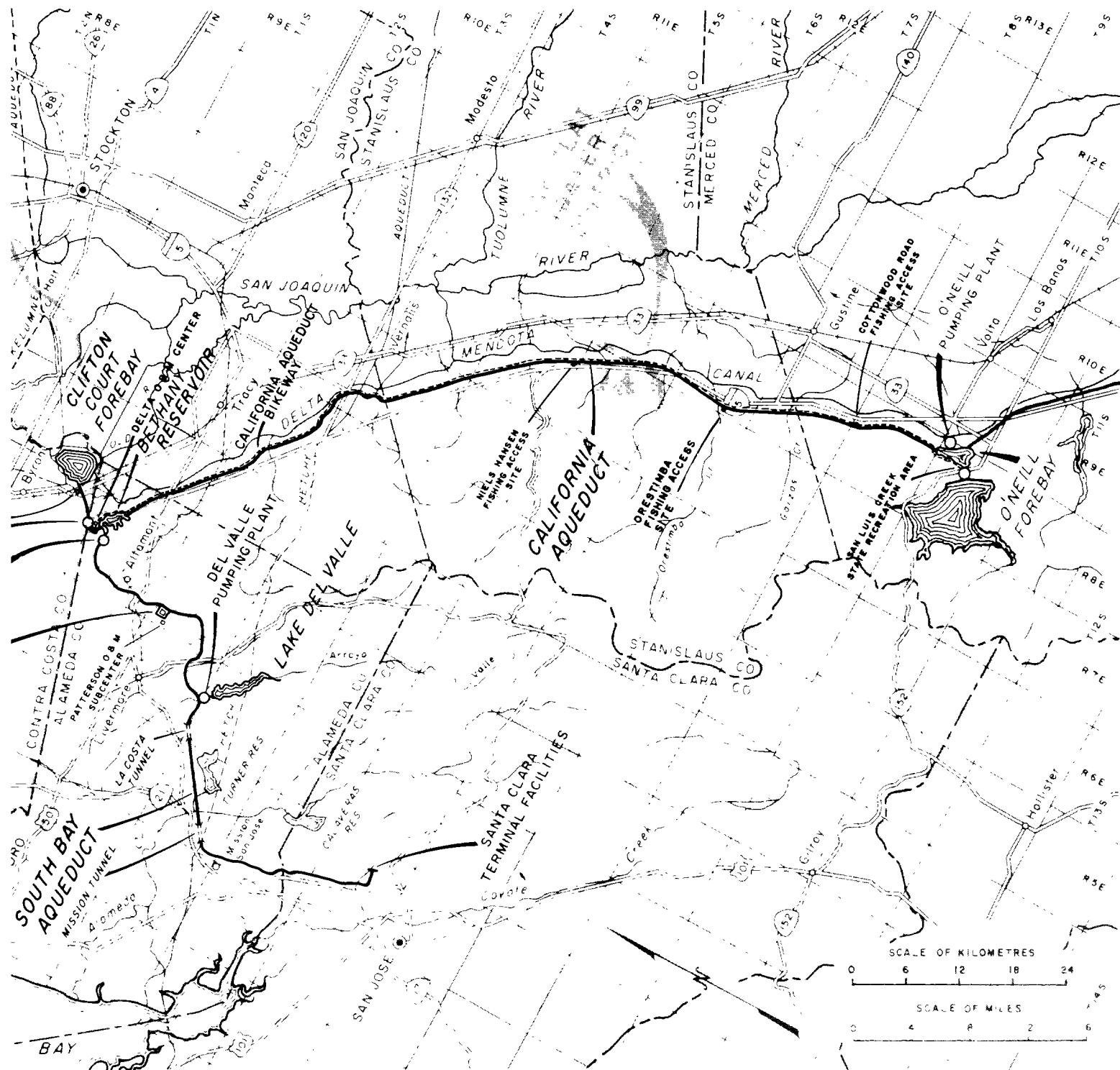


Water Quality Work Boat "M. V. San Carlos"

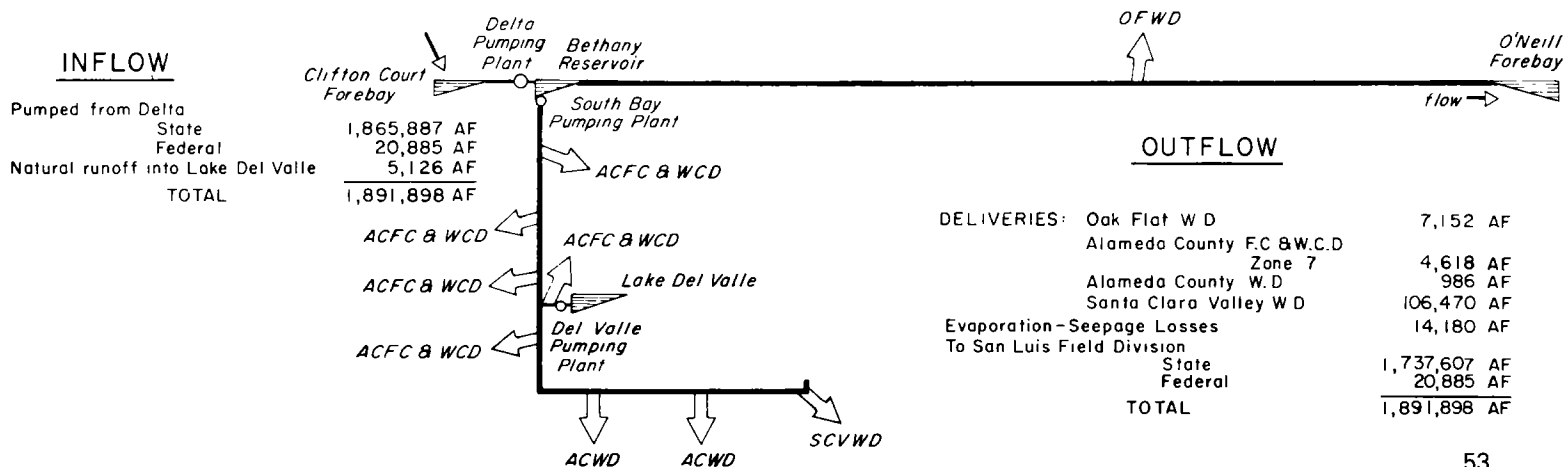
Figure 11: DELTA



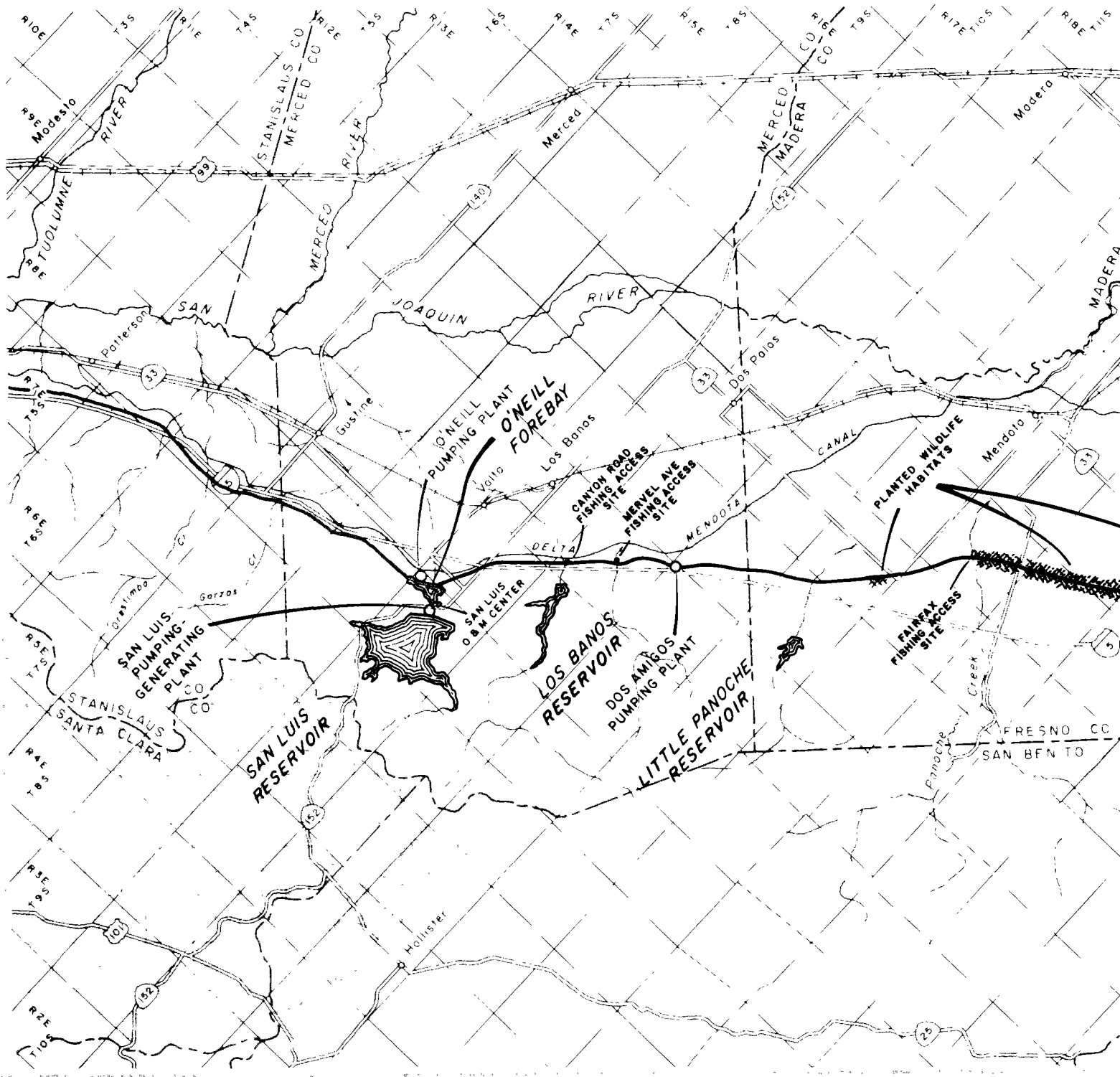
# FIELD DIVISION



Water operations within the Division during 1975



**Figure 12: SAN LUIS**

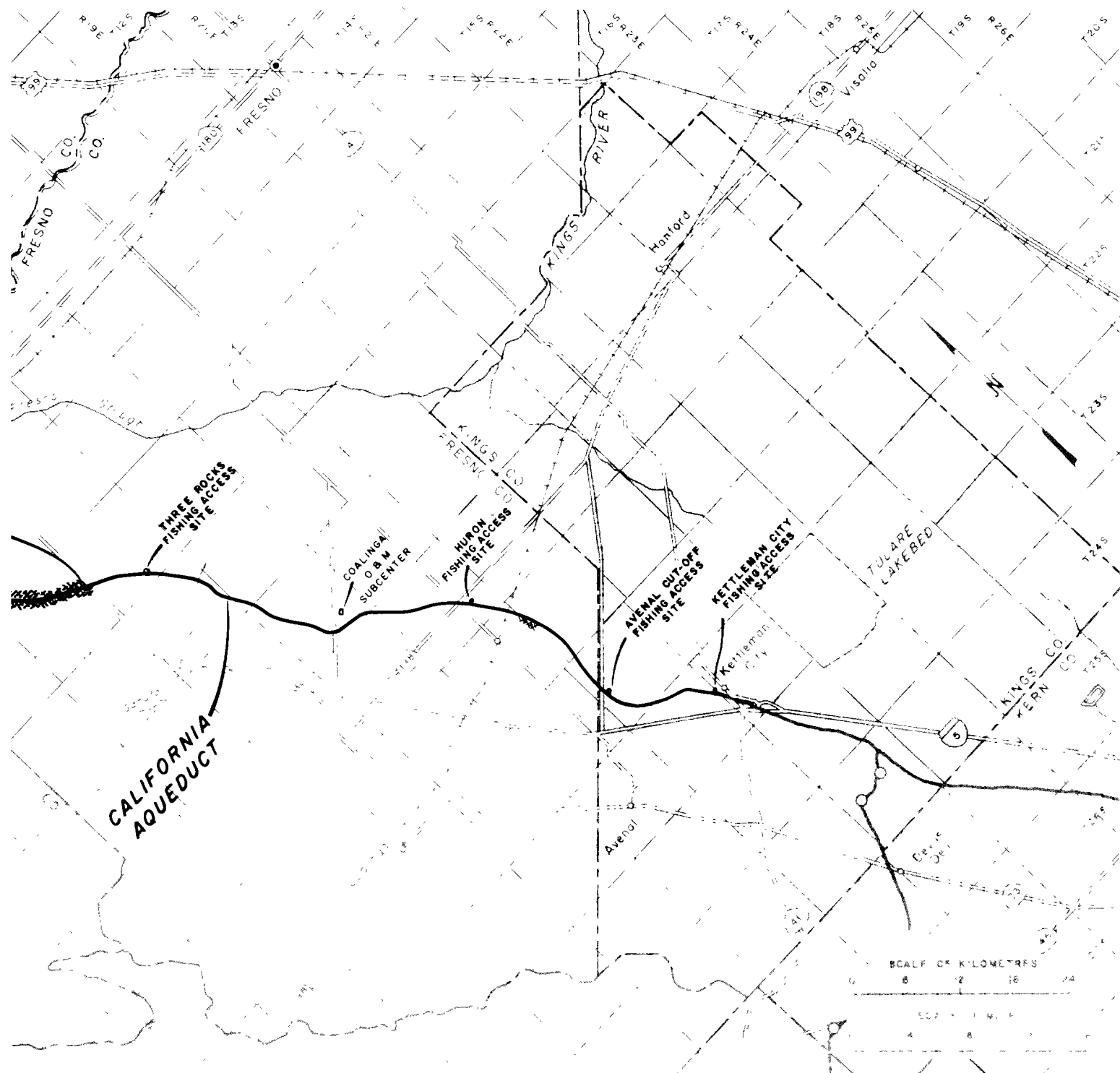


### San Luis Field Division

On January 1, 1975, storage in the San Luis Reservoir was 2 390 587 cubic dekametres (1,938,052 acre-feet). Water pumped into the reservoir during 1975 totaled 1 202 240 cubic dekametres (974,657 acre-feet); water released to O'Neill Forebay amounted to 1 368 783 cubic dekametres (1,109,674 acre-feet).

Computed evaporation, seepage, and other losses totaled 99 250 cubic dekametres (80,460 acre-feet). On December 31, 1975, storage in the reservoir was 2 124 796 cubic dekametres (1,722,575 acre-feet); 1 127 669 cubic dekametres (914,203 acre-feet) of which was state project water, the remainder, federal project water.

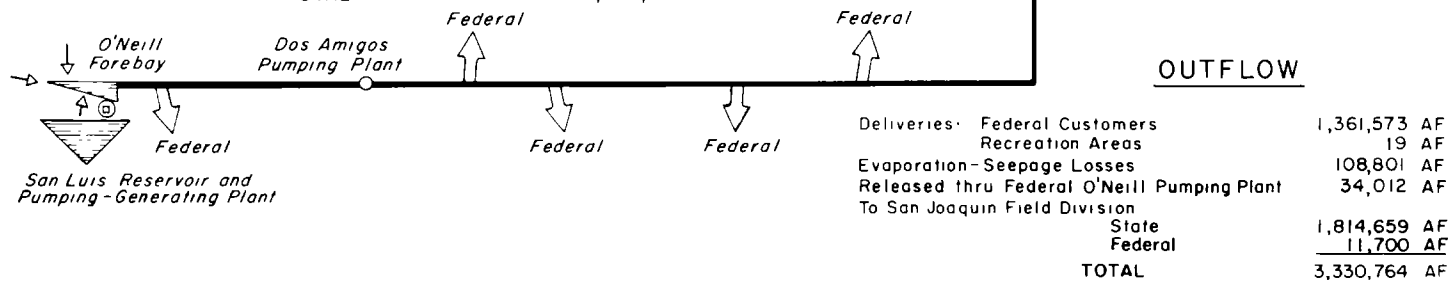
# FIELD DIVISION



## Water operations within the Division during 1975

### INFLOW

From Delta Field Division:		
State	1,737,607	AF
Federal	20,885	AF
From Federal O'Neill Pumping Plant	1,356,795	AF
Net decrease of San Luis Reservoir storage	215,477	AF
<b>TOTAL</b>	<b>3,330,764</b>	<b>AF</b>



Total storage in San Luis was maintained near the 2 514 824 cubic dekametres (2,038,771 acre-feet) full capacity level for the first part of the year. Maximum and minimum storage levels during the year were 2 472 084 cubic dekametres (2,004,122 acre-feet) on April 21 and 1 118 997 cubic dekametres (907,172 acre-feet) on August 31, respectively.

On January 1, 1975, storage in Los Banos and Little Panoche Reservoirs was 23 438 cubic dekametres and 377 cubic dekametres (19,001 and 306 acre-

feet), respectively. On December 31, 1975, storage was 23 731 cubic dekametres and 380 cubic dekametres (19,231 acre-feet and 308 acre-feet), respectively.

In 1975, 1 679 500 cubic dekametres (1,361,573 acre-feet) were delivered to customers of the federal Central Valley Project from the San Luis Division. Deliveries to federal customers were made from 166 turnouts (44 permanent and 122 temporary).



O'Neill Forebay and San Luis Reservoir





Las Perillas Pumping Plant and Coastal Aqueduct

## San Joaquin Field Division

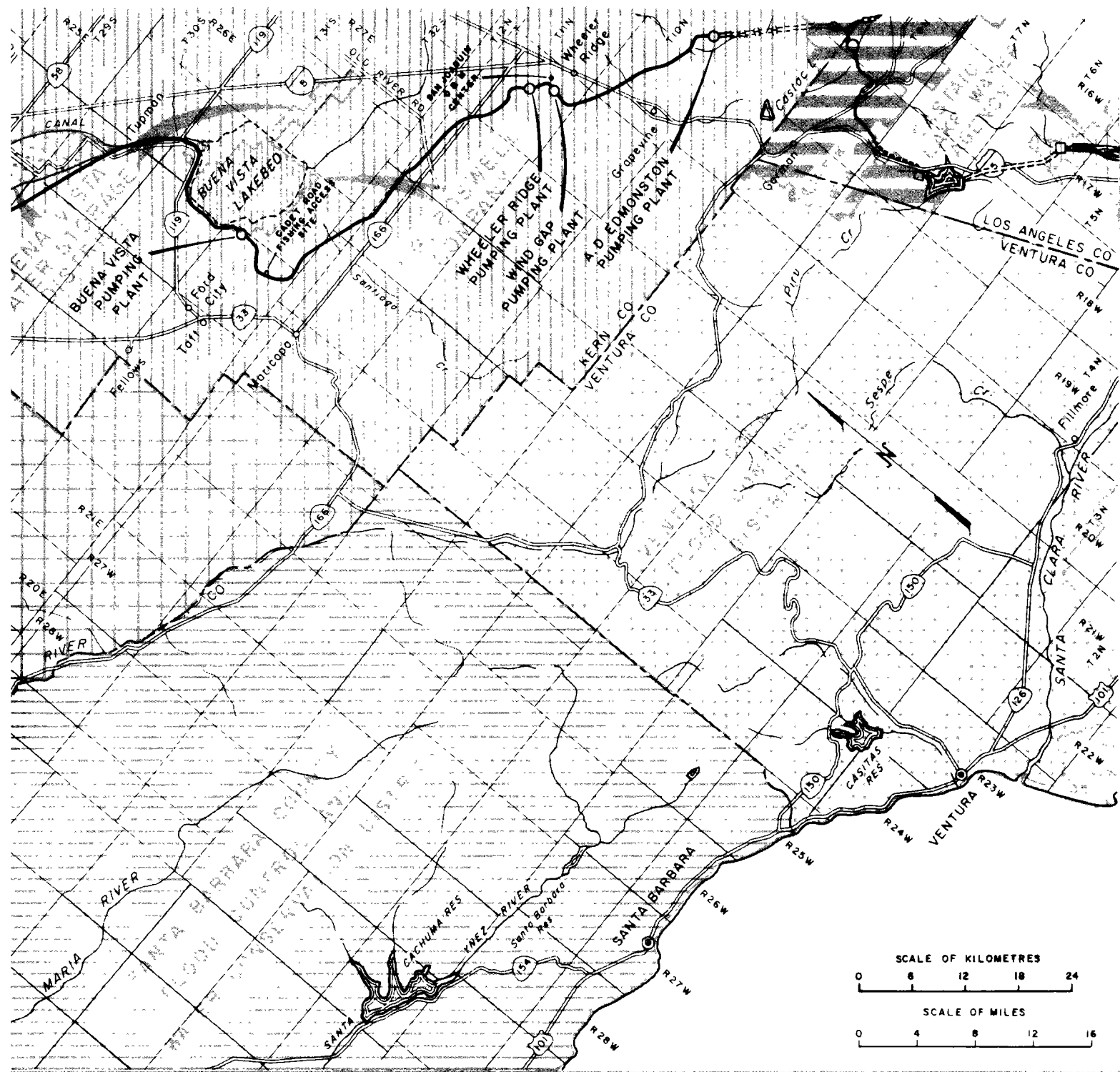
Equipment installations and modifications were performed to allow for remote control of the water delivery turnouts from the San Joaquin Area Control Center. These turnouts are presently controlled at the site by personnel working rotating shifts for around-the-clock coverage.

Initial water deliveries to Kern County Water Agency at the Cross Valley Canal turnout began in July. New turnouts were activated to serve lands in Lost Hills Water District and Wheeler Ridge-Mari-copa Water Storage District.

Aqueduct flow demands increased to the point of utilizing 10 units at the A. D. Edmonston Pumping Plant for an instantaneous flow rate of 91 cubic metres per second (3,200 cubic feet per second).

On September 6, Wind Gap Pumping Plant was shut down because of flooding which resulted from a failure of the 10-inch balance line on Unit No. 5. The plant was dewatered and returned to full operational status on September 14, except for Units Nos. 4 and 5 which have a common discharge line. On October 11 repairs were completed on Unit No. 5, and Units Nos. 4 and 5 were available for operation.

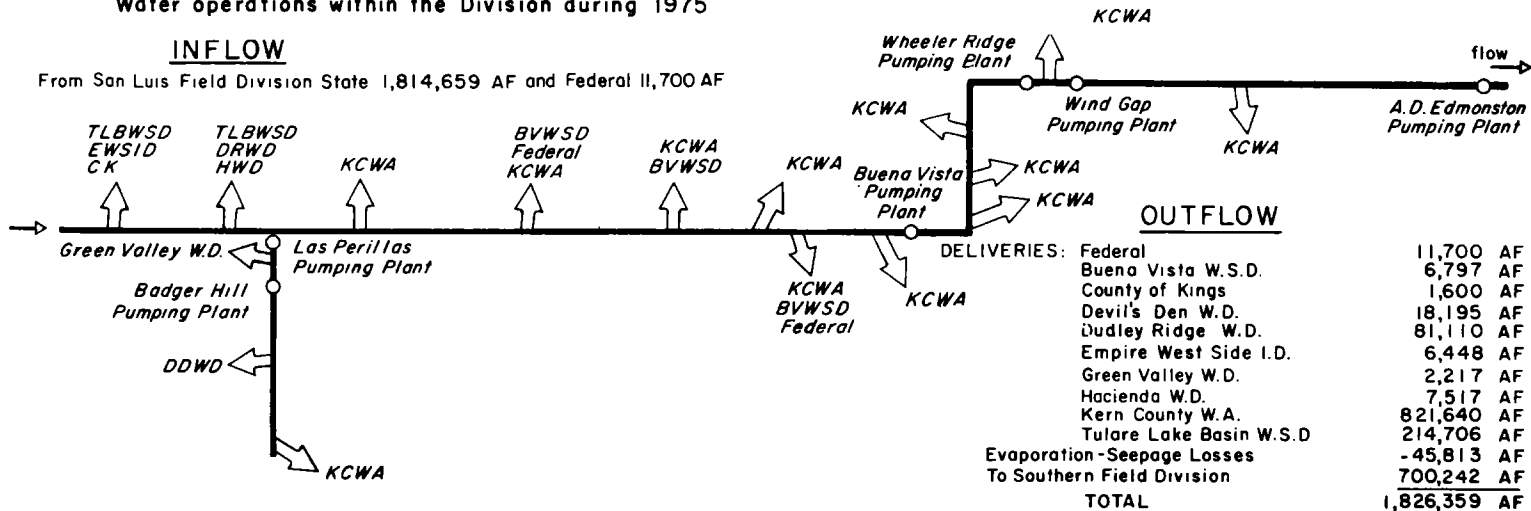
# FIELD DIVISION



Water operations within the Division during 1975

## INFLOW

From San Luis Field Division State 1,814,659 AF and Federal 11,700 AF



## S uth rn Fi ld Divisi n

By the end of 1975, all major permanent facilities in the Southern Field Division were operating normally.

At the end of the year reservoir storage at Pyramid, Castaic, Silverwood, and Perris was 205 146; 291 412; 76 124; 115 504 cubic dekametres, (166,312; 236,248; 61,714 and 93,639 acre-feet) respectively. Elderberry Forebay storage was 25 873 cubic dekametres (20,975 acre-feet). The low storage in Silverwood Lake the last four months of the year was due to curtailed pumping which resulted from the flooding of Wind Gap Pumping Plant.

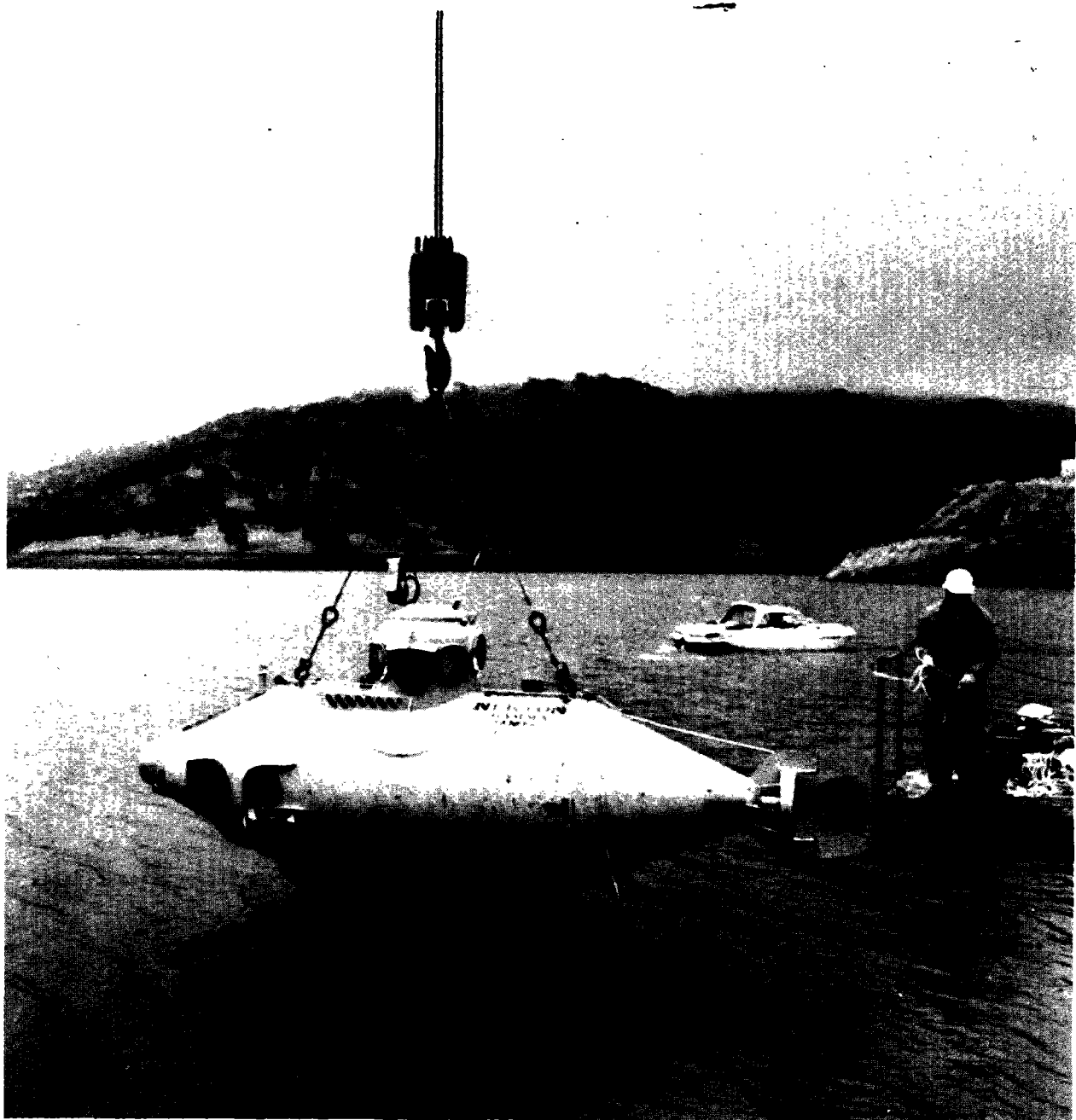
On the West Branch, Gorman Creek was shut down for three days in January to perform minor grouting immediately downstream of the 78-inch valve. During this period all of the water pumped at the A. D. Edmonston (Tehachapi) Pumping Plant was transported through the East Branch.

The Angeles Tunnel was dewatered between March 16 and June 4 to allow the Los Angeles Department of Water and Power to install valves on Penstocks 3, 4, 5, and 6 of the Castaic Powerplant. Service to water contractors on the West Branch was provided from storage in Castaic Reservoir.

In April, during the tunnel outage, modifications to the 108-inch valve at the outlet of Quail Lake were performed. Refilling of the tunnel began on June 4 and was completed on June 6. The successful testing of the intake slide gate was performed locally at the gate control panel, Castaic Powerplant; Southern California Aqueduct Control Center; and the Project Operations Control Center.



Pyramid Lake



Mini-submarine Used for Inspection of Facilities

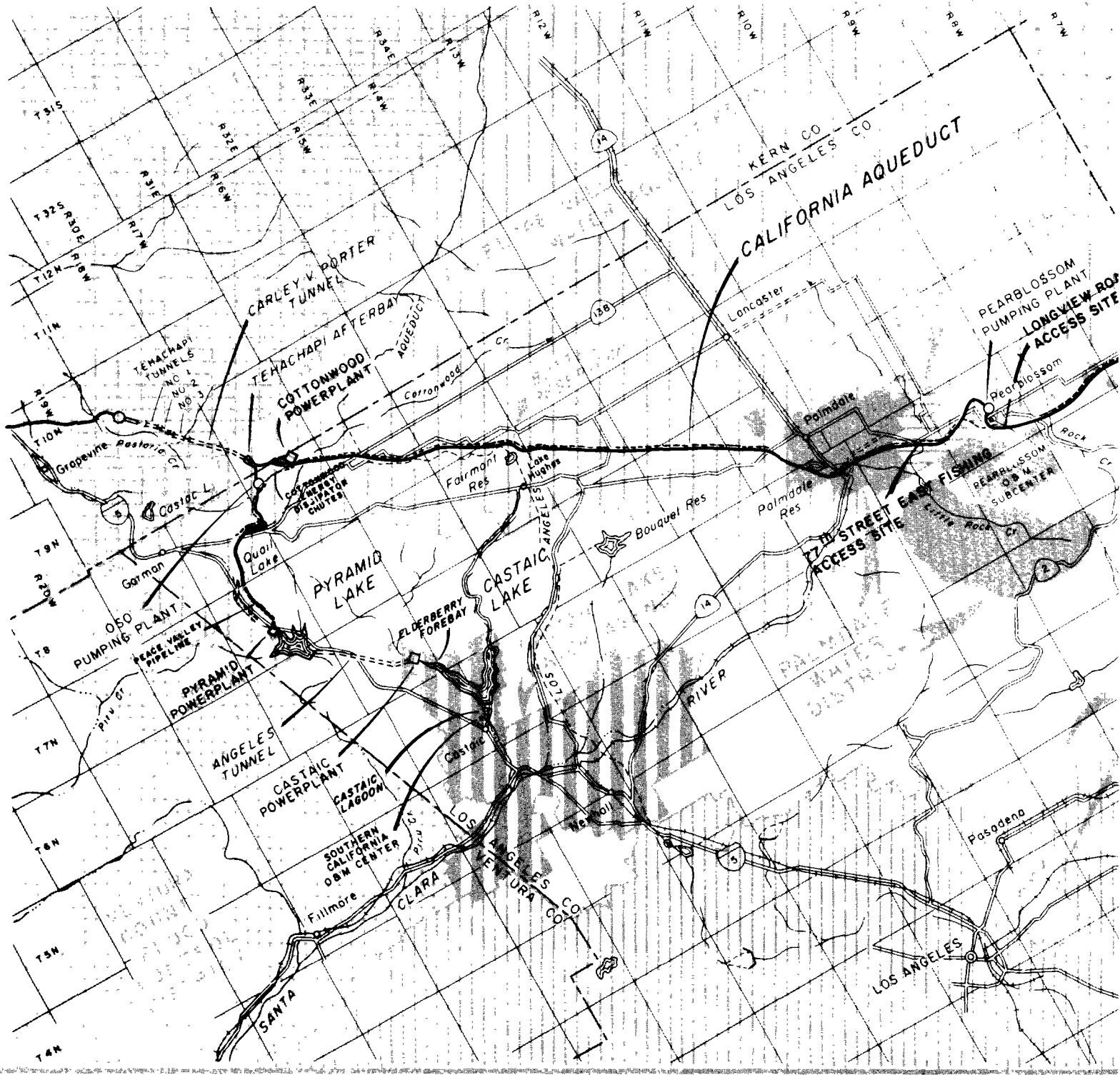
Stoplogs were installed in the Carley V. Porter Tunnel outlet in September to allow for the installation of the radial gates at the Tehachapi Control Structure.

In December a mini-submarine was used at Castaic Lake to inspect the high and low intake structures and the upstream face of the dam and at Pyramid Lake to inspect the stream release intake and the Angeles Tunnel intake structures. The inspection uncovered no problems and the facilities were operating normally.

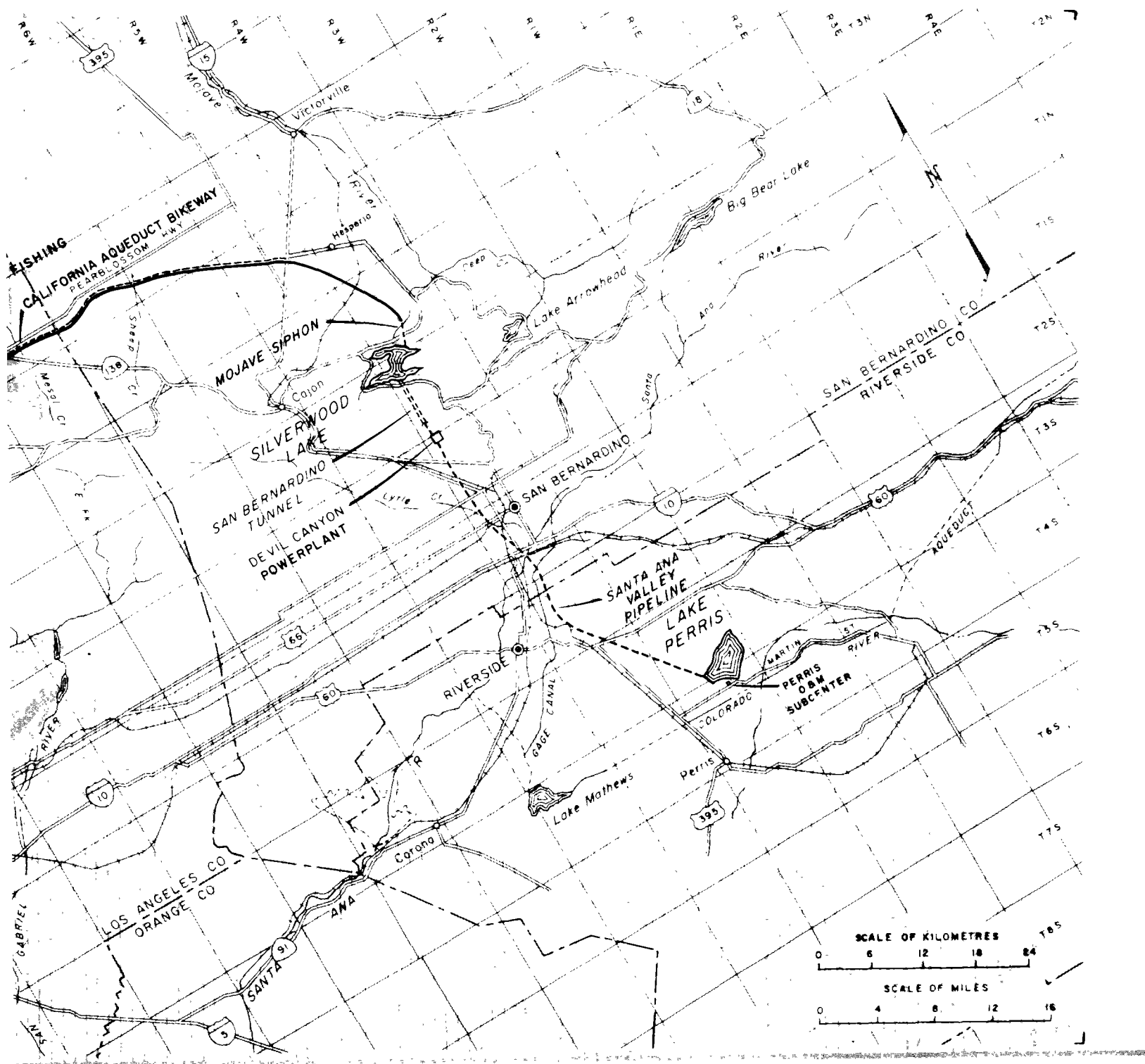
On September 12, Silverwood Lake reached its lowest elevation of the year [Elevation 1 015.5 metres (3,331.8 feet) with a corresponding storage of 66 796 cubic dekametres (54,152 acre-feet)]. As a consequence of the low elevation of Silverwood Lake, generation at Devil Canyon Powerplant was limited to a flow of 9.9 cubic metres per second (350 cubic feet per second).

In the Santa Ana Division, the San Gabriel Valley Municipal Water District turnout slide gate was installed during April.

Figure 14: SOUTHERN



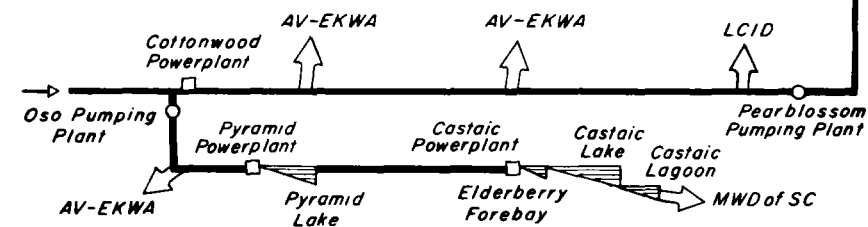
# FIELD DIVISION



### Water operations within the Division during 1975

## INFLOW

From San Joaquin Field Division	700,242	AF
Natural runoff into Pyramid Lake	14,594	AF
Natural runoff into Castaic Lake	6,596	AF
Natural runoff into Silverwood Lake	6,272	AF
<b>TOTAL</b>	<b>727,704</b>	<b>AF</b>



## OUTFLOW

DELIVERIES:	Antelope Valley - East Kern W. A.	8,068 AF
	Coachella Valley County W. D.	7,000 AF
	Crestline - Lake Arrowhead W. A.	825 AF
	Desert W. A.	11,000 AF
	Littlerock Creek I. D.	876 AF
	San Bernardino Valley M.W.D.	13,865 AF
	San Gabriel Valley M.W.D.	5,450 AF
	The Metropolitan W.D. of S.C	526,958 AF
	Recreation Areas	3,358 AF
	Water Rights Entitlement	27,933 AF
	Evaporation-Seepage Losses	33,075 AF
	Net Increase of Reservoir Storage	89,296 AF
	<b>TOTAL</b>	<b>727,704 AF</b>





Perris Visitor Center



## **Project Visitor Us**

Approximately 1.5 million visitor days of use occurred at the project facilities, amounting to a 12 percent decrease in overall visitation from the 1.7 million people visiting the facilities in 1974. Visitors include people entering or stopping near visitor centers and overlooks, and those participating in guided tours of project facilities.

During the year, the visitor center at Perris Dam was completed and opened for use. Construction of the new visitor center at Castaic Dam was completed at the end of the year and the facility will be operational in 1976.

Also in 1975, the Department issued for the first time a brochure on the Project written in the Spanish language.

## **Recreation and Fish and Wildlife Activities**

About 4.2 million people used the State Water Project for recreation during 1975, approximately a 3 percent increase from the 4.1 million recreationists reported in 1974. The recreation total includes people engaged in camping, boating, swimming, fishing (lake or aqueduct), and bicycling.

About 10,500 cyclists used the California Aqueduct Bikeway facilities in 1975: 1,100 along the Aqueduct from Bethany to O'Neill and 9,400 in the Antelope Valley. This total represents an 80 percent increase from the 5,800 cyclists reported in 1974. The total length of bikeway in operation is about 241 kilometres (150 miles).

During the year, new construction of recreation facilities occurred at the following sites. The Department of Parks and Recreation is responsible for the construction of onshore recreation facilities and the Department of Navigation and Ocean Development is responsible for the boating facilities.

### ***Antelope Lake***

Construction was completed in November 1975 on a 53-unit campground (38 family sites and 15 group sites) which included 5 comfort stations, water supply and waste water treatment facilities.

### ***Frenchman Lake***

Construction was completed in August 1975 on a 65-unit campground, consisting of 5 fishing access day-use sites with 130 parking spaces, 4 comfort stations, 5 vault toilets, water supply and waste water treatment facilities.

### ***Lake Oroville Complex***

At the Lime Saddle area, two lanes were added to the boat ramp, the existing boat ramp was extended, and additional parking was provided. The boat ramps at the Loafer Creek area were also extended.

### ***Bethany Reservoir***

The tree-planting program was completed in 1975; however, many of the plants died. The contractor will replace the lost plants in 1976.

### ***Lake Del Valle***

Construction was completed on 64 family campsites, 900 day-use parking sites, 4 comfort stations, 2 swimming beaches, a program center, and utilities.

### ***San Luis Complex***

Phase III day-use facilities were under construction and completion is expected in 1976. Increased parking, landscaping, and a loading float at the boat ramp were provided at the Dinosaur Point Area. Access roads to the Basalt area were paved.

### ***Silverwood Lake***

Miller Canyon group day-use area, the West Fork group camping, and Mesa family camping area were under construction in 1975 with completion expected late in 1976. Cleghorn Canyon day-use facilities, consisting of picnic units, swimming beach, parking, and fishing access, were completed. Ramadas were constructed at the boat-in areas.

### ***Lake Perris***

Construction of recreation support features was started in August 1975 with completion expected in 1977. Landscaping at the boat ramp with water systems, trees, beach, and chemical toilets was completed in 1975. The Bernasconi Pass boat-in day-use area was also completed. Development consisted of ski beach, picnic tables, and chemical toilets.

### ***Castaic Lake***

Castaic Ridge area was opened for the first time. The area was landscaped in 1975.

### ***Aqueduct Fishing Access Sites***

Three new fishing facilities were opened on the California Aqueduct in 1975.

- Orestimba Fishing Access Site, Stanislaus County.

- 77th Street East Fishing Access Site, Los Angeles County.

Longview Road Fishing Access Site, Los Angeles County.

This marked the first time that fishing access sites became available along the Aqueduct in Southern California.

An additional 177 kilometres (110 miles) of aqueduct was opened to walk-in fishing June 29, 1975, extending fishing availability from Kettleman City to the A. D. Edmonston (Tehachapi) Pumping Plant. Fishing is now permitted on 552 kilometres (343 miles) of the Aqueduct.

### **California Aqueduct Fishery**

In June when Pools 7 and 12 of the California Aqueduct

were being dewatered, the Department of Fish and Game, assisted by Department of Water Resources personnel and equipment, and by volunteers, removed an estimated 55 000 kilograms (122,000 pounds) of fish from the Aqueduct. The displaced fish were planted in the pool immediately downstream, except for many nongame fish, including carp and black fish, which were given to charitable organizations. Most of the rescued fish were catfish. About 20 species, both game and nongame, were observed. Some of the more popular species were striped bass, channel and white catfish, American shad, green sunfish, and crappie.

Recreation use in 1975 and 1974 at State Water Project facilities is shown in the following tabulation:

Facility	Recreation Use in Recreation Days		Facility	Recreation Use in Recreation Days	
	1975	1974		1975	1974
<u>Oroville Field Division</u>			<u>San Luis Field Division (Cont.)</u>		
Frenchman Lake	148,000	144,800	Three Rocks F.A.S.	800	500
Antelope Lake	100,000	177,800	Huron F.A.S.	1,200	400
Lake Davis	271,000	252,900	Avenal Cutoff F.A.S.	1,400	1,100
Lake Oroville Complex	539,000	573,800	California Aqueduct		
TOTAL	1,058,000	1,149,300	Walk-in fishing	7,100	16,000
			TOTAL	449,200	399,500
<u>Delta Field Division</u>			<u>San Joaquin Field Division</u>		
Lake Del Valle	117,400	162,200	Lost Hills F.A.S.	6,000	3,500
Clifton Court Forebay	2,300	3,200	Buttonwillow F.A.S.	13,700	7,900
Cottonwood Road F.A.S.	1,300	1,000	Cadet Road F.A.S.	4,900	2,900
Niels Hansen F.A.S.	1,200	900	Kettleman City F.A.S.	2,100	1,200
Orestimba F.A.S.	400	—	California Aqueduct		
California Aqueduct			Walk-in fishing	2,000	—
Walk-in fishing	16,800	21,400	TOTAL	28,700	15,500
California Aqueduct					
Bikeway	1,100	1,600			
TOTAL	140,500	190,300	<u>Southern Field Division</u>		
<u>San Luis Field Division</u>			Castaic Lake	1,013,200	1,056,300
San Luis Reservoir,			Silverwood Lake	426,000	426,100
O'Neill Forebay, and			Pyramid Lake	276,200	119,400
Los Banos Reservoir	435,900	378,800	Lake Perris	788,100	712,900
Canyon Road F.A.S.	700	900	Bikeway	9,400	4,300
Mervel Avenue F.A.S.	1,000	800	TOTAL	2,512,900	2,319,000
Fairfax F.A.S.	1,100	1,000	GRAND TOTAL, SWP	4,189,300	4,073,600

Additional details on recreation activities within each field division are presented in the following:

### ***Oroville Field Division***

Fishing success at Antelope Lake declined in 1975 for the third successive year. The Department of Fish and Game is evaluating the need for chemical treatment to restore angling. The Lake was planted with 20,650 rainbow trout (catchable) and 152,500 rainbow trout (fingerlings).

Department of Fish and Game initiated a major study at Lake Davis of the trout fishery in 1975. Evaluation of marked fish returns and creel censuses will continue in 1976. The Lake was planted with 458,700 rainbow trout (fingerlings).

Frenchman Lake was chemically treated in October 1975 for the removal of rough fish. After the detoxification period, the Lake was planted with 98,500 catchable rainbow trout. The Lake was closed for fishing until April 24, 1976.

Studies by the Department of Fish and Game to determine suitable methods to improve angler success at Lake Oroville continued in 1975. The fishery for both coldwater and warmwater species in 1975 was good. The Lake was planted with 2,000 eastern brook trout (catchable), 5,400 brown trout (catchable), 55,000 Eagle Lake trout (catchable), 16,400 brown trout (subcatchable), 40,500 silver salmon (subcatchable), and 300,500 kokanee salmon (fingerling).

In 1975, 746,000 steelhead (fingerlings), 144,000 steelhead (yearlings), 9,444,000 king salmon (fingerlings), and 873,000 king salmon (yearlings), which were produced at the Feather River Hatchery, were released into the Feather River.

Fishing and hunting access was maintained at Thermalito Afterbay by the Department of Fish and Game. Estimated use by waterfowl hunters totaled 1,654 user days.

Waterfowl depredation control measures to reduce bird damage on adjacent agriculture areas were conducted prior to the 1975 waterfowl hunting season by herding large concentrations of birds from the Thermalito Afterbay with boats and pyrotechnic devices. These measures moved waterfowl south to more suitable locations, such as the Gray Lodge Wildlife Area.

### ***Delta Field Division***

Public hunting for waterfowl was conducted at Clifton Court Forebay from October 18, 1975, through January 18, 1976. A total of 697 hunters were issued permits. They took 1,192 birds for an average of 1.7 birds per hunter. The Forebay is best suited for scull boating. Hunters using the banks or hunting from conventional boats were the least successful.

An estimated 11.6 million fish were salvaged in 1975 at the Delta Fish Protective Facility. This figure

is the third lowest recorded and reflects the greatly reduced pumping rates that were in effect during the normal period of peak fish abundance. Pumping rates were greatly reduced from the latter part of May through the first of August as part of the fish test conducted by four agencies to study the effect of export pumping on the survival of young-of-the-year striped bass. The three most abundant species of fish salvaged were striped bass, 4.8 million; American shad, 2.9 million; and threadfin shad, 1.8 million. An estimated 5.5 million striped bass and 2.5 million white catfish passed through the screens and entered the aqueduct in 1975.

Discussions between the Departments of Water Resources and Fish and Game to develop a program to implement the physical improvements to the Delta Fish Protective Facility as recommended in the "Evaluation Testing Program Report" for this facility were actively continued in 1975. At present, the Departments are awaiting the results of a short-term research project on the nighttime behavior of fish by the Bay Delta Projects fish screen criteria program.

At Lake Del Valle a total of 49,100 catchable rainbow trout was planted in 1975.

### ***San Luis Field Division***

Creel censuses to gather sport catch data at San Luis Reservoir and O'Neill Forebay were conducted on two- to four-weekend days per month through August and 15 days per month in November and December. This was integrated with the Department of Parks and Recreation use data to develop the following total use and harvest estimates. At least 174,300 angler days were spent to harvest 89,000 striped bass and 3,000 other (8) species (mostly white catfish) at San Luis, and at least 147,000 angler days were spent to harvest 78,500 striped bass and 36,000 white catfish at O'Neill.

In November 1975, a study jointly funded by the Department of Fish and Game and the Department of Water Resources was initiated on the fisheries of San Luis Reservoir and O'Neill Forebay. This reservoir complex has provided an attractive fishery, particularly for striped bass, since 1970. The fisheries which have developed at these facilities are unique to the extent that striped bass are continually recruited to the system via water diversions from the southern Delta. Because of the economic significance associated with the reservoirs and because changes in operations are scheduled in conjunction with future water deliveries, the study was initiated to gather information needed to manage this complex system. The objectives of the study are to: (a) determine the size and age composition and the length-weight relationship of striped bass in the sport catch; (b) estimate the total use and catch (all species) at each facility; and (c) develop efficient techniques for sampling segments of the fisheries which do not appear in the angler's catch. During November and

December, a program for collecting and analyzing data was developed and work commenced on gathering fishery data.

Habitat development along the San Luis Division of the California Aqueduct in 1975 consisted of replanting and maintenance, by the Department of Fish and Game, of wildlife habitat developed in 1974 along approximately 16 kilometres (10 miles) of the Aqueduct. The work area was located between San Diego Avenue and State Highway 198 in western Fresno County.

The Wildlife Habitat Development crew replanted new stock to replace dead trees and shrubs, weeded and irrigated established plants, and staked new plantings. Large weeds, Russian thistle and *Bassia* were hand-hoed, piled, and burned. Approximately 18 hectares (45 acres) of young *Atriplex* encroaching on the aqueduct right of way were disked under.

Species planted during the year consisted of 5,100 bare root honey mesquite trees, 315 potted desert thorn, 130 bare root desert thorn, and 53 bare root willow trees.

### ***Southern Field Division***

The California Aqueduct in Southern California was planted with 20,000 (subyearlings) and 13,000 (yearlings) channel catfish.

Silverwood Lake was planted with 170,000 trout.

An experimental plant of 80 Florida strain bluegill was made in Lake Perris in March 1975. It is anticipated that these fish will become established in the reservoir and may help improve growth characteristics of bluegill. All bluegills now present in California waters are descendants of a northern strain of fish introduced from Illinois in the 1890s. This strain has shown tendencies to overpopulate and become stunted; therefore, less desirable to anglers. Also planted in the Lake were 113,500 trout and 55,000 channel catfish (subyearlings).

The second year of hunting of wildlife at Lake Perris was completed on a successful note. Although hunter take continues to be relatively low, the area continues to provide upland and waterfowl hunting opportunities for the unattached hunter within a reasonable distance of the Riverside-San Bernardino area.

At Pyramid Lake 81,500 trout and 37,000 channel catfish (subyearlings) were planted.

Creel census data at Castaic Lake revealed a high catch rate for young large-mouth bass. To lessen the angler pressure on these fish, a 12-inch minimum size limit was recommended and will go into effect March 1, 1976. The 10,000 channel catfish planted in Castaic Lake were in two groups: In March, 5,000 yearling catfish were stocked. One hundred and twenty bore \$5 reward tags. By the end of December 1975, 30 tags (25 percent) had been recovered. An additional 5,000 catfish (subyearlings) were planted in November. One hundred and twenty of these fish were tagged with \$5 reward tags. Also planted in Castaic Lake and Lagoon were 183,000 trout.

During 1975 the Department of Fish and Game completed the second year and began the third year of a five-year wildlife enhancement project along the Mojave Division of the California Aqueduct. This program consists of planting trees and shrubs of known value as food and/or cover sources for wildlife. When completed, the program will provide almost 809 hectares (2,000 acres) of habitat for wildlife in the Antelope Valley. Last year also saw the Department of Fish and Game, the U. S. Forest Service, and the Department of Water Resources working toward an acceptable solution to the mitigation requirements of the State Water Project in Southern California. Final determination of the mitigation program is expected in the fall of 1976.

## CHAPTER V. PROJECT FINANCING

As of December 31, 1975, over \$2.27 billion had been expended by the Department for constructing the facilities of the State Water Project. These expenditures include costs of planning, design, financing, relocations, land acquisition, and operations during the construction period of each facility.

While the initial project facilities were completed in 1973, continuing construction will be required to satisfy future demands. The Department's current assumptions concerning costs of future facilities indicate that project construction expenditures will eventually total nearly \$5.8 billion, which includes \$1.6 billion to allow for future cost escalation. The additional conservation facilities (which have not been selected) are assumed to cost \$2.5 billion (including escalation) and to be financed entirely by the State Water Project. This estimate does not include potential costs to the Project for possible future sources of pumping power now being studied (see Chapter I). Under current expectations, such obligations in excess of other available funds would be financed by the sale of revenue bonds.

Also excluded from the above estimates are the costs of project-associated works which, though essential for realizing full project benefits, are financed and constructed by local and state public agencies other than the Department. Such associated works include:

Distribution systems required to convey water from project aqueducts to users, financed and constructed by water contractors and their member units. The costs of such works are estimated to total \$2.3 billion, \$1.3 billion of which had been incurred as of the end of 1975.

Onshore recreation developments at project facilities, financed and constructed by a variety of state and local agencies. Almost \$100 million had been expended for such developments through 1975, with a like amount expected in the future.

On the other hand, the Department's capital expenditures for the Project include requirements other than those for construction, such as:

Disbursements under the Davis–Grunsky Act Program.

- Special capital requirements under revenue bond financing (see Line 23).

This chapter presents a detailed analysis showing a financially viable State Water Project, producing revenues which are sufficient to pay all annual costs of operations and maintenance, to meet all repayment obligations on funds used to finance construction and, eventually, to produce financing for additions to the Project that may be authorized in the future.

The financial analysis is shown in Table 7 in two spreads. Actual and projected capital expenditures

and sources of financing are shown in Spread 1 and graphically in Figure 15. Actual and anticipated revenues and the application thereof to pay project operating expenses and to repay capital financing are shown in Spread 2 and graphically in Figure 16.

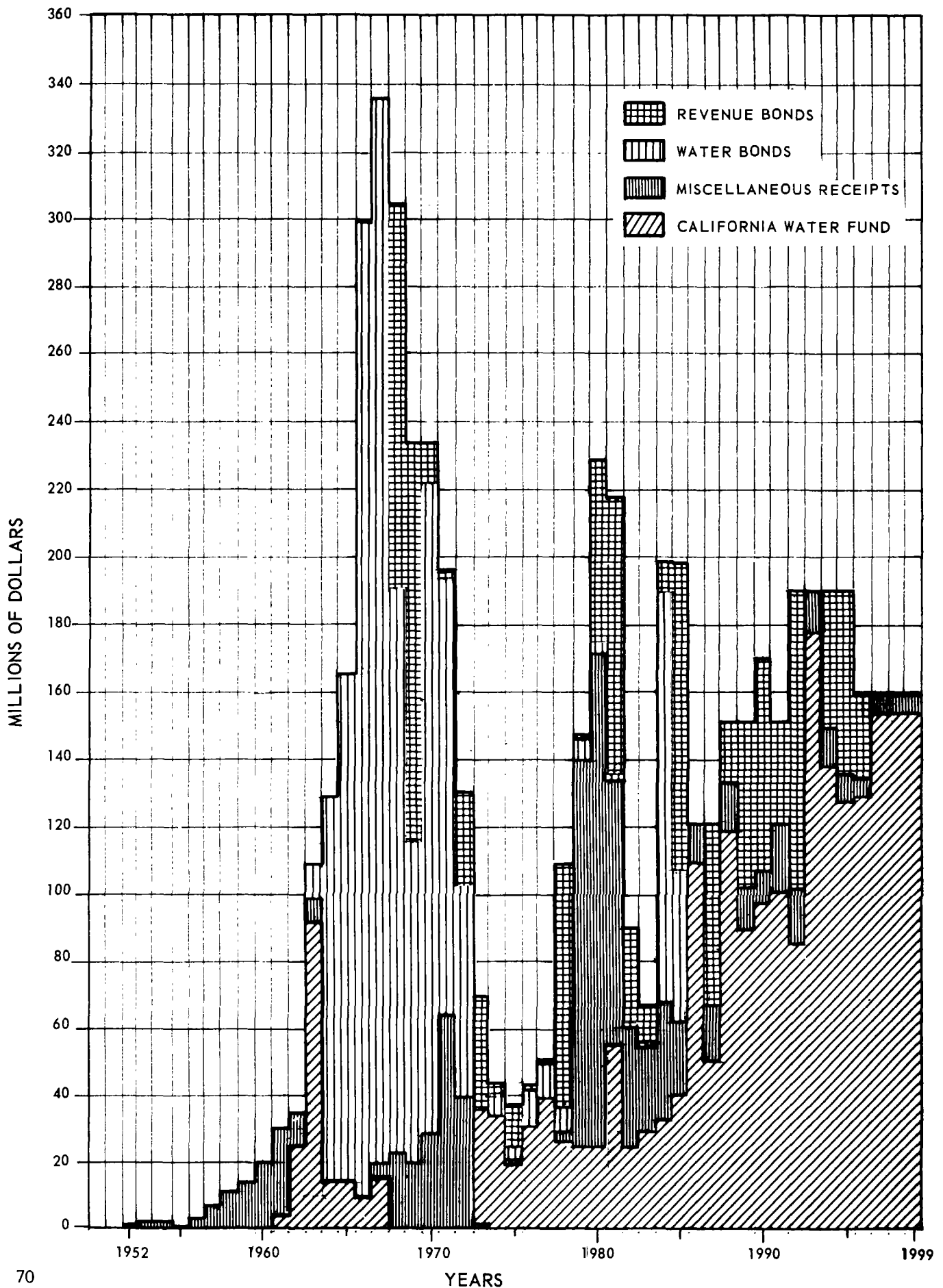
The financial analysis is based on the major assumption that the Department would sell revenue bonds in connection with the construction of certain future project facilities—with proceeds sufficient to fulfill the currently estimated need for supplemental financing. [Supplemental financing refers to funds in excess of those (1) on hand; (2) anticipated under current agreements, legislative enactments, and authorized bond issues; and (3) assumed to be provided under future agreements with the United States in connection with the Delta Facilities.] The analysis indicates a total need for supplemental construction funds of \$629 million (\$693 million including bond interest, operating costs, and bond discount) occurring during the 17-year period 1980 through 1996. The analysis also assumes no change in the present statutory provisions regarding state tideland oil and gas revenues.

Additional supplemental funds needed would be supplied by future sale of revenue bonds as authorized by the Central Valley Project Act. Revenue to support the bonds could be provided by payments made by agencies benefiting from the facilities built with the bond proceeds.

Future conditions undoubtedly will cause changes in the financial analysis set forth in Table 7. For this reason, basic assumptions are comprehensively reviewed and the financial analysis updated periodically. Notable contingencies not reflected in the financial analysis include:

- A delay beyond the current 1978 target date for financial participation by the United States in the construction of joint-use Delta Facilities.
- Deviation from estimates of available energy and its costs.
- Deviation of actual rates of future construction price inflation from those currently assumed for cost estimates.
- Changes in disposition of Oroville power.
- Rescheduling of currently planned construction for future facilities.
- Possible development of alternative sources of additional water not included in present plans.
- Need to expand the Project to serve areas not now contemplated.
- Changes in contractors' entitlements due to changing needs.
- Construction contractors' claims.

**Figure 15 FINANCING OF CAPITAL EXPENDITURES  
1952 THROUGH 1999**



Furthermore, the outcome of certain lawsuits now pending before the courts (see Chapter I) could affect project capital expenditures or anticipated project revenues.

With regard to the first contingency, the Department will not construct the Delta Facilities without financial participation by the United States (Bureau of Reclamation). If the form of financial participation is a contract between the State and the Bureau for

the conveyance (wheeling) of Central Valley Project water through the Delta Facilities, rather than a federal appropriation of construction funds as assumed in this financial analysis, the indicated need for supplemental funds would increase during the period from 1978 through 1985.

The following sections describe the individual line items of Table 7 and current assumptions related thereto.

**Figure 16: APPLICATION OF PROJECT OPERATING REVENUES**

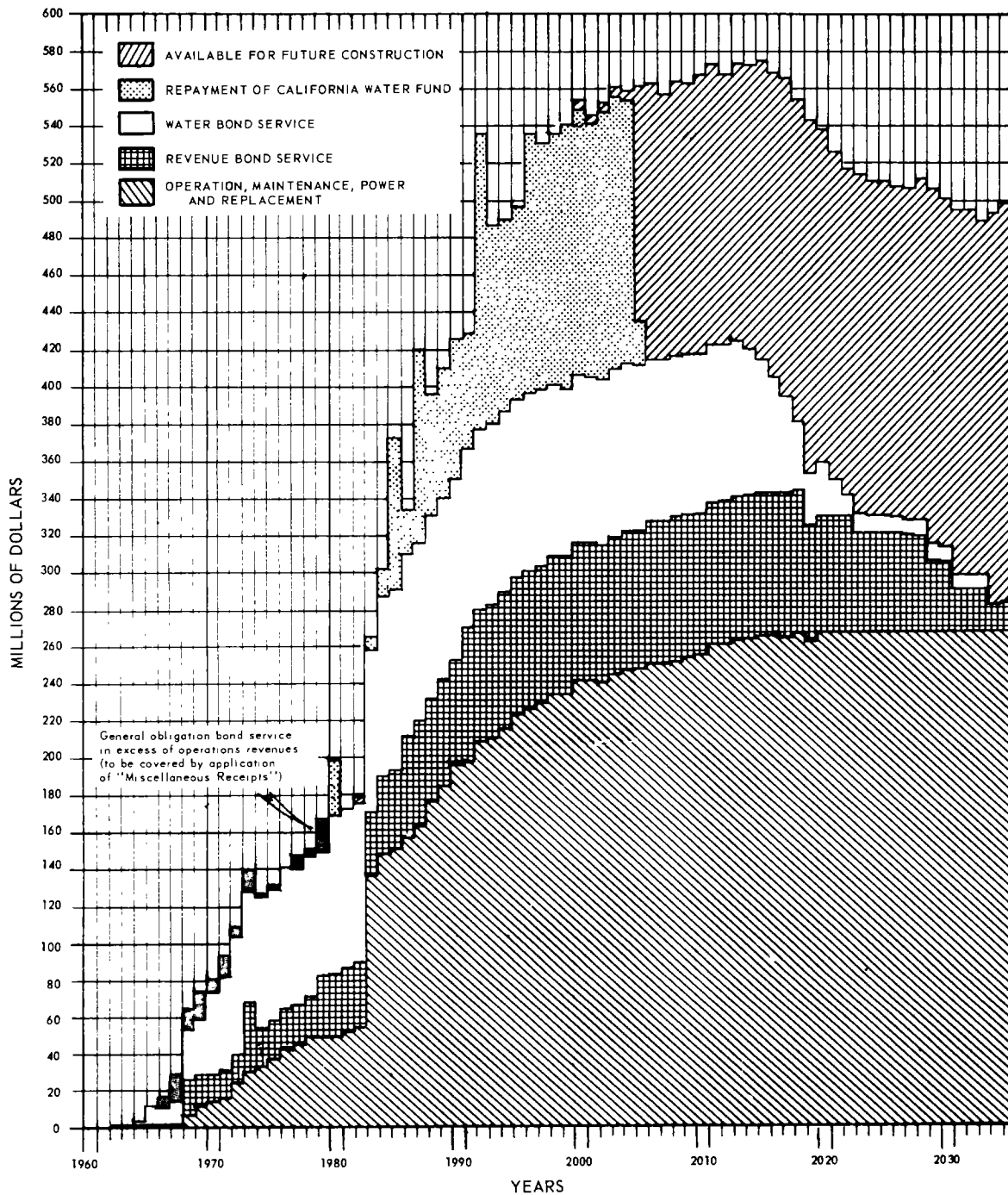


TABLE 7: PROJECT FINANCIAL

(in millions)

LINE NO.	LINE ITEM	CALENDAR										
		1952-1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
		<u>CAPITAL</u>										
	<u>PROJECT CONSTRUCTION EXPENDITURES</u>											
1.	Initial Project Facilities	2,163.8	0	0	0	0	0	0	0	0	0	0
2.	Abbey Bridge and Dixie Refuge Dams and Reservoirs	0.8	0	0	0	0	0	0	0	0	0	0
3.	Phase II of the North Bay Aqueduct	0.2	0.7	1.2	1.5	1.2	5.3	9.4	2.2	0.1	0	0
4.	Delta Facilities	31.4	7.9	13.9	36.3	67.3	110.0	110.9	47.4	29.4	32.9	18.2
	California Aqueduct:											
5.	Final Four Units at Delta Pumping Plant	0	0.6	1.1	2.4	3.8	5.1	3.3	2.2	0.1	0	0
6.	San Luis Canal Modifications	0	0	0	0	0	0	0.5	1.5	3.5	7.3	7.3
7.	Final Three Units at A. D. Edmonston Pumping Plant	0	0	0	0.1	0.4	1.6	4.6	7.1	7.1	3.9	0.9
8.	Staged Units and Pipelines South of A. D. Edmonston	13.4	3.8	0.8	0.2	2.0	3.5	2.4	1.8	0.4	0	0
9.	Buttes Dam and Reservoir	0.1	0	0	0	0	0	0.1	0.2	0.9	8.0	9.5
10.	Final Three Units at Las Perillas and Badger Hill	0	0	0.8	0	0.1	0.3	0.5	0.1	0	0	0.3
11.	Peace Valley Pipeline and Pyramid Powerplant	2.6	2.1	12.1	29.2	31.3	17.9	3.9	0	0	0	0
12.	Cottonwood Powerplant	2.4	0.2	0.8	2.4	3.0	3.4	2.7	0.8	0	0	0
13.	Phase II of the Coastal Branch	0	0	1.6	3.3	10.8	37.0	34.5	7.1	1.1	0.4	0
14.	General Costs	37.7	14.8	4.7	1.6	1.9	2.3	1.9	0.5	0.3	0.1	0.2
15.	SUBTOTAL, California Aqueduct	56.2	21.5	21.9	39.2	53.3	71.1	54.4	21.3	13.4	19.7	18.2
16.	Miscellaneous Project Costs	10.5	1.3	1.3	0.6	0.2	0.2	0.1	0.1	0.2	0.1	0.1
17.	Additional Conservation Facilities	8.5	0.6	0.4	0.3	0.2	0.2	0.2	0.2	0	74.0	73.9
18.	San Joaquin Drainage Facilities	7.2	0.6	0.6	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.1
19.	SUBTOTAL, PROJECT CONSTRUCTION EXPENDITURES	2,278.6	32.6	39.3	78.4	122.7	187.2	175.3	71.5	43.4	127.0	110.5
20.	Cost Escalation Allowance	0	0.5	2.6	8.2	18.9	39.3	42.6	18.8	15.3	72.6	65.9
21.	TOTAL PROJECT CONSTRUCTION EXPENDITURES	2,278.6	33.1	41.9	86.6	141.6	226.5	217.9	90.3	58.7	199.6	176.4
	<u>OTHER CAPITAL REQUIREMENTS</u>											
22.	Davis-Grunsky Act Program	92.9	10.5	9.3	7.2	5.8	3.3	1.0	0	0	0	0
23.	Special Capital Requirements under Revenue Bond Financing	39.1	0	0	15.6	0	0	0	0	9.4	0	23.3
24.	TOTAL OTHER CAPITAL REQUIREMENTS	132.0	10.5	9.3	22.8	5.8	3.3	1.0	0	9.4	0	23.3
25.	TOTAL CAPITAL REQUIREMENTS	2,410.6	43.6	51.2	109.4	147.4	229.8	218.9	90.3	68.1	199.6	199.7
		<u>FINANCING OF</u>										
26.	APPLICATION OF CALIFORNIA WATER FUND MONEYS	263.3	31.0	40.5	25.8	25.7	25.8	56.9	25.8	29.7	33.2	41.6
	<u>APPLICATION OF PROCEEDS FROM SALE OF BONDS:</u>											
27.	Oroville Revenue Bonds	245.0	0	0	0	0	0	0	0	0	0	0
28.	Devil Canyon-Castaic Revenue Bonds	70.4	1.3	0.9	57.0	0.2	0	5.0	0	0	0	4.3
29.	Supplemental Revenue Bonds	0	0	0	15.6	0	60.7	78.5	28.3	12.9	9.9	87.7
30.	Water Bonds, Davis-Grunsky Program	92.9	10.5	9.3	7.2	5.8	3.3	1.0	0	0	0	0
31.	Water Bonds, Additional Conservation Facilities	8.4	0.8	0.5	0.2	0.2	0.2	0.2	0.2	0.2	121.3	44.0
32.	Water Bonds, Initial Project Facilities	1,443.8	0	0	0	0	0	0	0	0	0	0
33.	TOTAL, Application of Proceeds from Sale of Bonds	1,860.5	12.6	10.7	80.0	6.2	64.2	84.7	28.5	13.1	131.2	136.0
34.	APPLICATION OF MISCELLANEOUS RECEIPTS TO CONSTRUCTION	286.8	0	0	3.6	115.5	139.8	77.3	36.0	25.3	35.2	22.1
35.	TOTAL FINANCING OF CAPITAL REQUIREMENTS	2,410.6	43.6	51.2	109.4	147.4	229.8	218.9	90.3	68.1	199.6	199.7



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of dollars)

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YEAR																			TOTAL 1952- 2035	LNL NO.
1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001- 2005	2006- 2015	2016- 2025	2026- 2035		
<u>EXPENDITURES</u>																				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,163.8	1.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	2.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21.8	3.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	505.6	4.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18.6	5.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.1	6.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25.7	7.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28.3	8.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18.8	9.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.1	10.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	99.1	11.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15.7	12.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95.8	13.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66.0	14.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	390.2	15.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.7	16.
73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	49.3	49.3	49.3	49.2	0	0	0	0	0	1,094.6	17.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.1	18.
73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	49.3	49.3	49.3	49.2	0	0	0	0	0	4,202.6	19.
47.3	47.3	77.9	77.9	77.9	77.9	116.3	116.3	116.3	116.3	109.7	109.7	109.7	109.8	0	0	0	0	0	1,595.0	20.
121.2	121.2	151.8	151.8	151.8	151.8	190.2	190.2	190.2	190.2	159.0	159.0	159.0	159.0	0	0	0	0	0	5,797.6	21.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	130.0	22.
0	0	0	0	20.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	107.5	23.
0	0	0	0	20.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	237.5	24.
121.2	121.2	151.8	151.8	171.9	151.8	190.2	190.2	190.2	190.2	159.0	159.0	159.0	159.0	0	0	0	0	0	6,035.1	25.
<u>CAPITAL EXPENDITURES</u>																				
110.0	51.3	130.3	90.2	98.3	101.9	87.5	177.3	141.5	131.1	131.7	154.0	154.0	154.0	0	0	0	0	0	2,312.4	26.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	245.0	27.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	139.1	28.
0.1	53.1	6.7	48.8	64.1	29.7	86.7	0	37.3	51.0	22.3	0	0	0	0	0	0	0	0	693.4	29.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	130.0	30.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	176.2	31.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,443.8	32.
0.1	53.1	6.7	48.8	64.1	29.7	86.7	0	37.3	51.0	22.3	0	0	0	0	0	0	0	0	2,827.5	33.
11.1	16.8	14.8	12.8	9.5	20.2	16.0	12.9	11.4	8.1	5.0	5.0	5.0	5.0	0	0	0	0	0	895.2	34.
121.2	121.2	151.8	151.8	171.9	151.8	190.2	190.2	190.2	190.2	159.0	159.0	159.0	159.0	0	0	0	0	0	6,035.1	35.

TABLE 7: PROJECT FINANCIAL

(in millions)

LINE NO.	LINE ITEM	CALENDAR										
		1952-1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
	MISCELLANEOUS RECEIPTS											
36.	Federal Payments for Project Capital Expenditures	74.7	0.8	0.1	27.2	46.5	74.1	68.4	29.4	19.8	23.8	13.4
37.	Appropriations Prior to the Burns-Porter Act	99.0	0	0	0	0	0	0	0	0	0	0
38.	Appropriations for Capital Costs Allocated to Recreation	50.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
39.	Appropriations Under SB 261 (1968)	82.7	0	0	0	0	0	0	0	0	0	0
40.	City of Los Angeles Payments for Castaic Power Development	37.4	0	0	0	0	0	0	0	0	0	0
41.	Water Contractor Advances for Construction Requested Works	71.1	0.9	0	0	0.1	0	0.1	0	0	0	0.1
42.	Investment Earnings on Unexpended Miscellaneous Receipts	62.1	9.2	9.8	8.4	16.5	10.7	5.4	1.6	0.5	6.4	3.6
43.	TOTAL MISCELLANEOUS RECEIPTS	477.0	15.9	14.9	40.6	68.1	89.8	78.9	36.0	25.3	35.2	22.1
	PROJECT OPERATING REVENUES											
44.	Payments Under Oroville Power Sale Contract	109.4	16.2	16.1	18.7	18.9	16.2	16.3	16.6	16.5	32.1	16.2
45.	Payments Under Devil Canyon-Castaic Contract	24.8	7.6	8.0	8.6	8.6	8.6	8.6	8.6	9.5	9.5	9.5
46.	Payments (Assumed) for Supplemental Revenue Bonds	0	0	0	0	12.7	12.7	13.8	13.7	13.7	20.8	20.7
47.	Payments Under Long-term Water Supply Contracts	506.5	105.3	108.7	108.8	104.4	154.6	124.6	131.7	214.9	243.8	315.1
48.	Federal Payments for Project Operating Costs	11.5	3.4	2.4	2.5	2.5	2.5	2.5	3.3	3.3	3.3	3.4
49.	Appropriations for Operating Costs Allocated to Recreation	6.6	1.8	2.0	2.1	2.1	2.0	2.3	2.4	3.8	4.1	3.8
50.	Payments Under Davis-Grunsky Loan Repayment Contracts	1.6	0.2	0.3	0.4	0.5	0.6	1.0	1.1	1.7	2.0	2.2
51.	Miscellaneous Revenues	105.9	2.0	2.0	17.6	2.0	2.0	2.0	2.0	11.4	2.0	21.0
52.	TOTAL PROJECT OPERATING REVENUES	766.3	136.5	139.5	158.7	151.7	199.2	171.1	179.4	274.8	317.6	391.9
53.	TOTAL MISCELLANEOUS RECEIPTS & PROJECT OPERATING REVENUES	1,243.3	152.4	154.4	199.3	219.8	289.0	250.0	215.4	300.1	352.8	414.0
	APPLICATION OF MISCELLANEOUS RECEIPTS											
54.	CARRYOVER (+) AND APPLICATION (-) OF RECEIPTS AND REVENUES HELD TEMPORARILY IN RESERVE	63.6	17.6	7.9	25.4	-64.5	-50.0	0	0	0	0	0
55.	PROJECT OPERATING COSTS	167.3	42.0	44.3	47.7	47.6	48.0	51.2	53.6	135.1	146.9	150.2
56.	DEPOSITS TO SPECIAL RESERVES UNDER REVENUE BOND FINANCING	51.9	0.3	0.3	18.5	3.1	0.4	0.5	0.7	10.0	16.3	19.3
	PAYMENTS OF BOND SERVICE:											
	Bonds Sold Through January 31, 1976:											
57.	Interest Payments	659.0	84.0	89.8	89.2	88.5	87.6	86.7	85.6	84.5	83.2	81.9
58.	Principal Repayments	14.7	8.5	11.8	14.4	15.5	18.0	20.1	21.4	23.7	25.1	26.1
	Assumed Future Bond Sales:											
59.	Interest Payments	0	0	0.3	0.5	14.1	14.0	14.2	14.1	14.1	30.2	30.2
60.	Principal Repayments	0	0	0	0	0	0	0	0	0	0	0
61.	TOTAL BOND INTEREST PAYMENTS	659.0	84.0	90.1	89.7	102.6	101.6	100.9	99.7	98.6	113.4	112.1
62.	TOTAL BOND PRINCIPAL REPAYMENTS	14.7	8.5	11.8	14.4	15.5	18.0	20.1	21.4	23.7	25.1	26.1
	REPAYMENT OF THE CALIFORNIA WATER FUND											
63.	Required for Construction	0	0	0	0	0	31.2	0	4.0	7.4	15.9	84.2
64.	Not Required for Construction	0	0	0	0	0	0	0	0	0	0	0
65.	APPLICATION OF MISCELLANEOUS RECEIPTS TO CONSTRUCTION	286.8	0	0	3.6	115.5	139.8	77.3	36.0	25.3	35.2	22.1
66.	SUBTOTAL, Repayment of Capital Financing	301.5	8.5	11.8	18.0	131.0	189.0	97.4	61.4	56.4	76.2	132.4
67.	RESERVATION FOR FUTURE CONSTRUCTION	0	0	0	0	0	0	0	0	0	0	0
68.	TOTAL APPLICATION OF MISCELLANEOUS RECEIPTS AND PROJECT OPERATING REVENUES	1,243.3	152.4	154.4	199.3	219.8	289.0	250.0	215.4	300.1	352.8	414.0

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YEARS																				TOTAL 1952- 2035	LINE NO.
1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001- 2005	2006- 2015	2016- 2025	2026- 2035			
<u>PROJECT OPERATING REVENUES</u>																					
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	378.2	36.	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	99.0	37.	
5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	25.0	50.0	50.0	50.0	350.0	38.
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	82.7	39.	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37.4	40.	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72.3	41.	
6.1	11.8	9.8	7.8	4.5	15.2	11.0	7.9	6.4	3.1	0	0	0	0	0	0	0	0	0	217.8	42.	
11.1	16.8	14.8	12.8	9.5	20.2	16.0	12.9	11.4	8.1	5.0	5.0	5.0	5.0	5.0	25.0	50.0	50.0	50.0	1,237.4	43.	
16.1	18.0	23.1	19.3	17.7	16.2	20.9	16.6	21.4	16.1	16.2	16.1	16.2	16.4	16.1	83.7	161.5	161.5	194.8	1,161.1	44.	
9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.4	9.4	9.4	9.4	9.4	9.4	9.4	47.2	96.1	69.6	0	466.6	45.	
34.7	34.8	37.0	37.9	38.0	52.6	54.9	55.0	55.5	55.5	58.8	58.8	58.9	58.8	60.3	305.9	633.0	638.2	428.9	2,865.6	46.	
362.2	347.9	319.3	336.1	349.8	337.5	444.3	393.2	397.5	405.6	443.6	436.6	440.0	448.3	452.6	2,267.1	4,620.1	4,321.2	4,232.4	23,373.7	47.	
3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	17.0	33.9	33.9	33.9	210.3	48.	
3.8	4.0	4.3	3.8	4.2	4.1	4.2	3.9	4.1	4.3	3.8	4.4	4.4	4.0	4.1	20.2	41.8	40.3	40.7	237.4	49.	
2.5	2.5	2.6	2.5	2.5	2.6	2.5	2.5	2.6	2.5	2.4	2.5	2.5	2.5	2.5	12.5	22.6	15.3	5.8	105.5	50.	
2.0	2.0	2.0	2.0	22.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0	0	0	0	0	218.0	51.	
334.2	422.1	401.2	414.5	447.2	427.9	541.7	486.1	495.9	498.8	539.6	533.2	536.8	544.8	548.4	2,753.6	5,609.0	5,280.0	4,936.5	28,638.2	52.	
345.3	438.9	416.0	427.3	456.7	448.1	557.7	499.0	507.3	506.9	544.6	538.2	541.8	549.8	553.4	2,778.6	5,659.0	5,330.0	4,986.5	29,875.6	53.	
<u>AND PROJECT OPERATING REVENUES</u>																					
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54.	
156.1	162.8	176.2	184.1	194.7	197.6	207.7	209.0	214.5	222.5	225.5	228.5	233.5	233.5	241.0	1,218.3	2,568.8	2,651.8	2,663.0	13,123.0	55.	
0.3	2.2	7.2	3.5	22.0	0.3	5.1	0.8	5.6	0.4	0.3	0.4	0.3	0.7	0.4	5.0	4.9	1.8	0	182.5	56.	
80.5	79.1	77.5	76.0	74.4	72.8	71.1	69.4	67.6	65.8	63.9	61.9	60.0	58.1	56.1	246.9	287.0	32.0	0	3,120.1	57.	
27.5	28.9	30.3	31.8	33.2	34.3	35.4	37.3	39.0	40.4	41.9	41.9	43.6	44.9	46.6	261.1	682.3	244.4	0	1,944.1	58.	
44.2	44.1	44.1	44.1	43.9	58.3	58.2	58.1	57.7	57.4	57.0	56.5	56.0	55.7	55.2	269.3	479.2	331.0	93.2	2,094.9	59.	
0	0.5	1.4	2.5	2.8	2.9	3.2	5.2	6.1	6.4	7.8	8.4	7.6	5.8	6.3	41.7	160.6	306.2	308.0	883.4	60.	
124.7	123.2	121.6	120.1	118.3	131.1	129.3	127.5	125.3	123.2	120.9	118.4	116.0	113.8	111.3	516.2	766.2	363.0	93.2	5,215.0	61.	
27.5	29.4	31.7	34.3	36.0	37.2	38.6	42.5	45.1	46.8	49.7	50.3	51.2	50.7	52.9	302.8	842.9	550.6	308.0	2,827.5	62.	
25.6	104.5	64.5	72.5	76.2	61.7	161.0	106.3	105.4	105.9	143.2	135.6	135.8	0	0	0	0	0	0	1,440.9	63.	
0	0	0	0	0	0	0	0	0	0	0	0	0	146.1	142.8	582.6	0	0	0	871.5	64.	
11.1	16.8	14.8	12.8	9.5	20.2	16.0	12.9	11.4	8.1	5.0	5.0	5.0	5.0	0	0	0	0	0	895.2	65.	
64.2	150.7	111.0	119.6	121.7	119.1	215.6	161.7	161.9	160.8	197.9	190.9	192.0	201.8	195.7	885.4	842.9	550.6	308.0	6,035.1	66.	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.0	153.7	1,476.2	1,762.8	1,922.3	5,320.0	67.
345.3	438.9	416.0	427.3	456.7	448.1	557.7	499.0	507.3	506.9	544.6	538.2	541.8	549.8	553.4	2,778.6	5,659.0	5,330.0	4,986.5	29,875.6	68.	

## Project Construction Expenditures

Actual and projected construction expenditures for each construction division of the Project are shown in Table 8—together with a preliminary allocation of such total expenditures among project purposes.

Described in the following sections are the Department's current assumptions concerning the costs of each facility of the future construction program as set forth in Table 7. As to any project not yet constructed, a decision to proceed will be made only after examination of all alternatives and completion of a final environmental impact report and other review processes.

Table 7 of Bulletin 132-75 listed the escalated costs of each facility of the future construction program. The current assumption for cost escalation has significantly increased the projected construction expenditures. To illustrate the effect of escalation, Lines 1 through 18 now show costs based on prices and salaries prevailing on December 31, 1975. The portion of cost attributed to escalation is shown in Line 20.

*Line 1: Initial Project Facilities.* This is the cost of the facilities included in the initial construction program concluded in 1973 (see Chapter II, Bulletin 132-74). Additional costs after 1973 and estimated costs of remaining work on the initial project facilities are included in Lines 14 and 16, "California Aqueduct, General Costs" and "Miscellaneous Project Costs".

*Line 2: Abbey Bridge and Dixie Refuge Dams and Reservoirs.* Bulletin 132-75 assumed these reservoirs would be completed by 1983. In 1975 the Plumas County Board of Supervisors recommended that Abbey Bridge be postponed until all reservoir areas in the county are brought up to standard for camping, sanitary facilities, and full capacity use. Also, in November 1975 a department report, "A Review of the Proposed Abbey Bridge Reservoir", was completed. The report concluded that: (1) environmental and economic impact of the proposed Abbey Bridge Reservoir generally would be favorable, (2) an environmental impact report would be necessary before construction commences, (3) the project would provide flood-control benefits, and (4) there is no local support or demonstrated need for the Project at this time. Therefore, the Department has not scheduled further work on the Abbey Bridge project at this time. The Dixie Refuge project, also in Plumas County and originally scheduled to be constructed after Abbey Bridge, has also been postponed indefinitely.

*Line 3: Phase II of the North Bay Aqueduct.* Special provisions of the water supply contracts with Solano and Napa County Flood Control and Water Conservation Districts include the following:

"The State shall not commence construction of any portion of the North Bay Aqueduct east of Cordelia (Phase II) until 1975 or such earlier date as may hereafter be agreed upon by the State, the Agency, and all other contractors taking water from the North Bay Aqueduct."

Article 6(a) of these contracts also specifies 1980 as estimated initial year of water delivery from the Delta. (Under the present arrangements, Napa County purchases Putah South Canal water from Solano County which is transported from Cordelia through Phase I of the North Bay Aqueduct to Napa.)

The current schedule for Phase II is to initiate final design during fiscal year 1976-77, construction during 1979, and deliveries in 1981. However, the districts are studying their future needs and may request that design and construction be further delayed.

*Line 4: Delta Facilities.* The financial analyses in Bulletin No. 132-75 were based on constructing the Peripheral Canal to be operational by 1982 to supply water needs in the Sacramento-San Joaquin Delta and to convey water across the Delta for export. However, numerous technical, legal, and policy issues were raised during the review of the Draft Environmental Impact Report on the Peripheral Canal which was issued in August 1974. Some of the issues raised indicated a need to reanalyze alternative courses of action including the need for and timing of physical facilities. Accordingly, a one-year study to review and evaluate Delta Facility alternatives was initiated in August 1975.

For financial analysis purposes in this bulletin, it was assumed that a joint state-federal Delta Water Facility would be constructed and operational in 1982 to supply Delta needs and to convey export water to the existing State Water Project and Central Valley Project pumping plants. The facility could be one of a number of alternative projects being studied. For financial analysis purposes, it was assumed this facility would have essentially the same magnitude of costs as the Peripheral Canal. The amounts shown in Line 4 include estimated total annual expenditures for the entire joint state-federal facility, exclusive of any federal planning costs. The total future costs of \$592 million shown for the Delta Facilities (1976 and thereafter) include \$568 million for design, right of way, and construction costs of the Project. The remaining \$24 million includes \$20 million for the costs of completing Delta planning and environmental studies and \$4 million for operating and allocated general project costs to be incurred during the construction period. (Delta water quality monitoring costs are included in Line 54 as annual operating costs.) These costs do not include construction of western Delta or Suisun Marsh facilities, which may or may not be needed.

*Line 5: California Aqueduct, Final Four Units at Delta Pumping Plant.* Two of these 30.2 cubic metres per second (1,067 cubic feet per second) units would be operational in 1981 and the remaining two in 1982.

*Line 6: California Aqueduct, San Luis Canal Modifications.* These modifications would be required to maintain and, eventually, to augment the present conveyance capacity between Dos Amigos Pumping Plant and Kettleman City. Measures to compensate

for subsidence along the canal would cost about \$8 million (state share) during the period 1981 through 1985. Allowance is included for a total expenditure of about \$19 million during the period 1983 through 1985 for increasing the State's share of conveyance capacity by about 28.3 cubic metres per second (1,000 cubic feet per second). This increase would be required to accommodate greater projected deliveries than estimated in 1959 when design capacities were established for the canal.

*Line 7: California Aqueduct, Final Three Units at A. D. Edmonston (Tehachapi) Pumping Plant.* These 8.9 cubic metres per second (315 cubic feet per second) units would be operational in 1984. (This schedule is currently under review.)

*Line 8: California Aqueduct, Staged Units and Pipelines South of A. D. Edmonston (Tehachapi) Pumping Plant.* Additional capacity would be installed as needed to convey growing project water deliveries through staged features, including the second barrel of Pastoria Creek Siphon (to be completed in 1982); the final two pumping units and discharge line at Pearblossom Pumping Plant and the final generating unit and penstock at Devil Canyon Powerplant (to be operational in 1976); and Castaic Dam and Outlet Works, Second Stage (to be completed in 1981).

*Line 9: California Aqueduct, Buttes Dam and Reservoir.* Current assumptions are that this off-aqueduct reservoir would be operational by 1986 to

TABLE 8: PROJECT CONSTRUCTION EXPENDITURES

(in thousands of dollars)

FACILITIES AND CONSTRUCTION DIVISIONS	INCURRED THRU 1975	FUTURE CONSTRUCTION PROGRAM	TOTAL	PRELIMINARY ALLOCATIONS AMONG PROJECT PURPOSES			
				Water Supply and Power Generation	Flood Control (a)	Recreation and Fish and Wildlife Enhancement	Other (b)
Feather River Facilities:							
Upper Feather Division	14,349	26	14,375	1,282	0	13,093	0
Oroville Division	506,787	2,599	509,386	429,292	68,448	11,646	0
North Bay Aqueduct	4,362	26,653	31,015	31,015	0	0	0
Delta Facilities	31,385	592,319	623,704	281,100	0	45,723	296,881
South Bay Aqueduct	69,588	96	69,684	49,047	7,156	13,457	24
California Aqueduct:							
North San Joaquin Division	155,283	24,699	179,982	173,738	0	6,244	
San Luis Division	177,073	27,826	204,899	197,070	0	7,619	210
South San Joaquin Division	261,573	4,131	265,704	257,701	0	8,003	
Tehachapi Division	262,996	43,335	306,331	297,150	0	9,181	
Mojave Division	212,069	51,795	263,864	255,546	0	8,318	
Santa Ana Division	183,034	5,120	188,154	177,777	0	10,377	
West Branch	360,312	120,883	481,195	463,902	0	17,072	221
Coastal Branch	14,668	121,013	135,681	135,576	0	0	105
Subtotal	1,627,008	398,802	2,025,810	1,958,460	0	66,814	536
Additional Conservation Facilities	8,426	2,491,802	2,500,228	2,497,734	0	41	2,453
San Joaquin Drainage Facilities	7,225	4,814	12,039	0	0	0	12,039
Unassigned	9,404	1,997	11,401	0	0	0	11,401
TOTAL	2,278,534	3,519,108	5,797,642	5,247,930	75,604	150,774	323,334

a) Reflects Department's allocation to this purpose, irrespective of federal payments.

b) Includes costs currently unassigned to purpose, planning costs of deleted features of project facilities, initial costs of inventoried items, and joint costs assigned to the Federal Government.

regulate project water deliveries to Antelope Valley–East Kern Water Agency. Under the Agency's water supply contract, construction of the facility by the State is conditioned on engineering and financial feasibility.

*Line 10: California Aqueduct, Final Three Units at Both Las Perillas and Badger Hill Pumping Plants.* These 3.2 cubic metres per second (112 cubic feet per second) units have already been installed by the Berrenda Mesa Water District, at the District's expense, under special agreement with the Department. Current assumptions are that the Department would replace Unit No. 4 by December 1981 and would purchase, at depreciated values, Unit No. 5 (together with the second discharge line at Badger Hill Pumping Plant, also constructed by the District) in January 1977, and Unit No. 6 in January 1985.

*Line 11: California Aqueduct, Peace Valley Pipeline and Pyramid Powerplant.* A description of the permanent facilities, which the Department plans for conveying water deliveries through the West Branch when project flows grow to exceed the capacity of the Gorman Creek Improvement in the early 1980s, is presented in Chapter I of Bulletin 132–74. For purposes of this analysis, these facilities are scheduled to be operational in 1981; however, this date is subject to revision pending the outcome of a study on the feasibility of staging construction of the Pyramid Power Complex (see Actions Concerning Project Power in Chapter I).

Costs shown in Line 11 for the power plant and Peace Valley Pipeline are not representative of either (1) the total project costs which could be allocated to the purpose of power generation at Pyramid or (2) the magnitude of revenue bonds which could be supported by such generation.

*Line 12: California Aqueduct, Cottonwood Powerplant.* For purposes of this analysis, this proposed power recovery plant on the East Branch is scheduled for operation in 1981. Since Cottonwood Energy Dissipator Chutes are already constructed, the Powerplant is not essential for conveying water deliveries. However, the plant could generate an amount of energy equivalent to burning nearly 31 800 cubic metres (200,000 barrels) of oil a year in an oil-fired thermal plant. Therefore, the schedule for this plant has been accelerated two years earlier than shown in Bulletin 132–75. (This schedule is currently under review.)

*Line 13: California Aqueduct, Phase II of the Coastal Branch* Phase II construction of the Coastal Branch would include and extend from the proposed Devil's Den Pumping Plant to a terminus on the Santa Maria River for water service to San Luis Obispo and Santa Barbara County Flood Control and Water Conservation Districts. For purposes of this analysis, Phase II is assumed to be operational in 1982; however, the two coastal contractors are presently considering delaying construction to a later date.

*Line 14: California Aqueduct, General Costs.* These expenditures cover such items as general design and construction costs, completion of aqueduct monitor and control systems and operation and maintenance facilities, and other completion activities for initial project facilities of the California Aqueduct. Portions of these costs would be allocated to the aqueduct units described in the preceding paragraphs.

*Line 15: Subtotal, California Aqueduct.* The total of Lines 5 through 14.

*Line 16: Miscellaneous Project Costs.* These expenditures cover such items as the completion of monitor and control systems and other completion activities for initial project facilities other than the California Aqueduct.

*Line 17: Additional Conservation Facilities.* The water supply provided by Oroville and San Luis Reservoirs and the Delta Facilities will eventually be insufficient to satisfy growing water delivery obligations under executed contracts. The financial analysis in Bulletin 132–75 was based on meeting needs for additional water supply which would have begun in 1988 and reached a maximum of 1 355 000 cubic dekametres (1,100,000 acre-feet) per year. For purposes of the analysis, it was assumed the needs for additional water would be met by contracting for unused conserved water in the Delta, obtaining water from the federal Cottonwood Creek Project, and contracting for water from some form of Eel River Development (see pages 73, 74, lines 17 and 21, of Bulletin 132–75 for a more complete description).

At present, the Department has not determined a final plan for obtaining additional water supplies to meet ultimate project needs. This is being considered in the study of alternatives in the Delta. It is considering a number of possible actions, but a decision is not expected for several years.

Since Eel River Development is prohibited under the California Wild and Scenic Rivers Act, and no other specific projects (such as Sacramento Valley Development) have had extensive planning studies performed, the Department has assumed costs for the financial analysis in this bulletin based on an estimate of unit costs of facility construction and yearly operation. These unit costs are not based on any specific development, but are considered representative of the eventual costs of meeting the remaining project needs from surface water storage. It is further assumed, for financial analysis purposes only, that construction of additional conservation facilities would be in four phases over a 16-year period, commencing in 1984 with completion in 1999. Financing would be entirely by the State. The first phase with about 370 000 cubic dekametres (300,000 acre-feet) of yield would be capable of meeting the increased demand in 1988. Increases in demands after 1988 would be met by the second, third, and fourth phases which provide yields of 370 000; 370 000; and 245 000 cubic dekametres, respectively (300,000; 300,000; and 200,000 acre-feet).

Completion of the fourth phase would meet the maximum additional demand of 1 355 000 cubic dekametres (1,100,000 acre-feet).

The results of the study of alternatives in the Delta may have a significant effect on the timing and sizing of the additional conservation facilities assumed for this financial analysis. After a course of action is decided for the Delta, a compatible plan to meet the full requirements of the Project will be developed.

Eel River planning studies will terminate in June 1977 and will be reactivated in 1982 to prepare the report required for the Legislature in 1985.

*Line 18: San Joaquin Drainage Facilities.* Included are the costs of (1) monitoring the quality of subsurface agricultural waste waters in the San Joaquin Valley; (2) studies on treatment of agricultural waste waters for reuse, management, and disposal; and (3) the Department's share of the costs for the San Joaquin Valley Interagency Drainage Program involving the Department, the State Water Resources Control Board, and the U. S. Bureau of Reclamation.

A major component of the Interagency Drainage Program will be to determine an equitable method for repayment of construction and operation costs of drainage facilities. The Department believes that consideration should be given to methods that do not necessarily require full repayment by the primary beneficiaries, as is usually the case with a water delivery system. The Department also believes there is a statewide interest in solving Valley drainage problems. The Program will propose a specific plan, including recommended facilities by the latter part of 1978.

*Line 19: Subtotal: Project Construction Expenditures.* The total of Lines 1 through 18.

*Line 20: Cost Escalation Allowance.* Line 20 is a new line for Bulletin 132-76. Estimates of future construction expenditures shown in Lines 1 through 18 are based on prices and salaries prevailing on December 31, 1975. The amounts in Line 20 are the estimated cost increases that could be expected to occur due to escalation. The following assumed percentages were applied to allow for escalation:

Year	Percent Increase Per Annum	
	State Salaries	Construction Prices
1976	6	8
After 1976	5	6

Land acquisition costs are assumed to escalate 7.25 percent per annum.

These escalation rates are believed to be those most probable to occur, given the present economic climate. The recent moderation experienced in cost escalation is expected to continue in the near term, and the long-term rates are considered to be the most likely averages about which actual rates will fluctuate. The financial analysis in Bulletin 132-75 assumed no escalation after 1982. Therefore, escalation after 1982 has a significant effect on the cost of additional conservation facilities.

*Line 21: Total Project Construction Expenditures.* The total of Lines 19 and 20.

**Figure 17: LOCAL PROJECTS UNDER THE DAVIS-GRUNSKY ACT PROGRAM**

### Other Capital Requirements

In addition to construction expenditures, capital requirements of the Project include the items discussed in the following paragraphs:

**Line 22: Davis-Grunsky Act Program.** This state financial assistance program for water developments constructed by local public agencies is associated with the State Water Project to the extent of \$130 million in capital expenditures. Such expenditures include disbursements under approved loans and grants and the Department's administrative costs incurred while the respective developments are under construction. (Administrative costs following construction are funded by project revenues.)

As of December 31, 1975, the Department and the California Water Commission had approved more than \$104.3 million in grants and loans for 77 local agencies located throughout the State as indicated on Figure 17. New loan and grant applications were approved during 1975 for the following agencies:

- \$166,000 construction loan to Humboldt County Service Area No. 3, Improvement Area No. 1, Humboldt County.
- \$950,000 construction loan to Tuolumne County Water District No. 1, Tuolumne County.
- \$2,891,000 construction grant to San Bernardino Valley Municipal Water District, San Bernardino County.
- \$2,359,392 construction loan to Placer County Water Agency, Zone 1, Placer County.
- \$3,167,000 construction loan to Paradise Irrigation District, Butte County.

Of the total approved applications, over \$41.7 million (40 percent) were for loans and the remaining \$62.6 million (60 percent) were for grants.

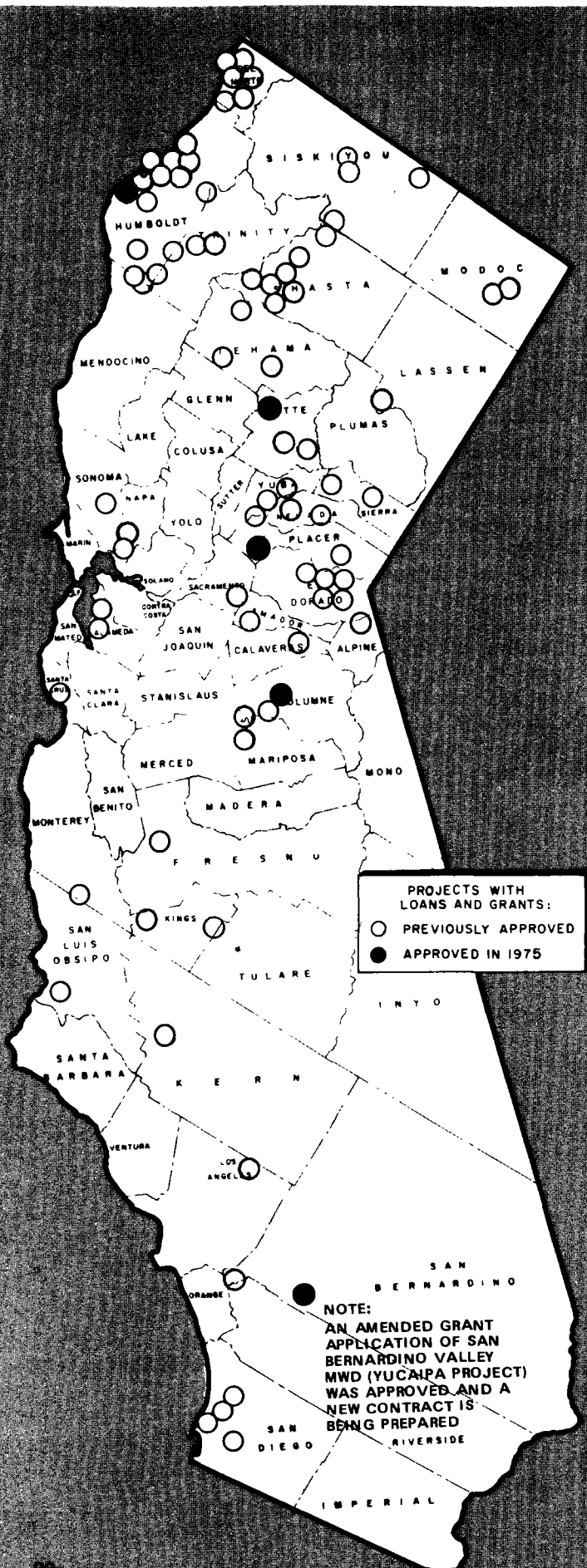
The Department estimates that funds presently authorized for the program would be disbursed by 1982.

**Line 23: Special Capital Requirements Under Revenue Bond Financing.** In addition to construction expenditures, the authority under which revenue bonds have been sold contemplates that proceeds shall also fund interest and operation of the financed facilities through one year following completion of construction. Application of proceeds to these requirements is shown below for actual and assumed revenue bond sales.

In 1985, Line 23 includes about \$4 million which is the portion of Devil Canyon-Castaic Revenue Bond proceeds not required for future construction and would revert to the Bond trustee.

**Line 24: Total, Other Capital Requirements.** The total of Lines 22 and 23.

**Line 25: Total Capital Requirements.** The total of Lines 21 and 24.





Application of Revenue Bond Proceeds	Oroville (actual)	Devil Canyon- Castaic (actual)	Supplemental (assumed)
(in millions)			
Construction expenditures	\$218.0	\$127.1	\$629.3
<u>Plus, Other capital requirements:</u>			
Reimbursement of General Fund	\$ 2.6	\$ 0.0	\$ 0.0
Bond interest through one year following completion of construction	19.9	10.0	48.6
Operating costs for one year following completion of construction	1.5	0.7	9.5
Bond discount	3.0	1.4	6.0
Subtotal	\$ 27.0	\$ 12.1	\$ 64.1
TOTAL, Principal amount of bonds	\$245.0	\$139.2	\$693.4

### Financing of Capital Expenditures.

Three general types of financing have been used for the Project:

*Burns-Porter financing*, derived from the sale of *California Water Resources Development Bonds* (Water Bonds) and a portion of the State's tideland oil and gas revenues that are deposited in the *California Water Fund* as authorized by the Burns-Porter Act (California Water Code Sections 12930-12944), approved by the Electorate in 1960.

- *Revenue Bond Financing*, derived from the sale of revenue bonds as authorized by the Central Valley Project Act (California Water Code Sections 11100-11925). The Department's authority to issue revenue bonds was confirmed by a decision of the Supreme Court of California in 1963 (*Warne v. Harkness* 60 Cal. 2d 579).

*Miscellaneous Receipts*, derived from payments and appropriations (including certain additional tideland oil and gas revenues) as authorized by a variety of special contracts, cost-sharing agreements, and legislative actions concerning the State Water Project.

To date, Water Bonds have financed most of the construction costs of the Project. The Burns-Porter Act authorized an issue of \$1.75 billion of general obligation bonds of the State, which are made self-supporting by revenues received under the water supply contract. This authorization includes a reservation of \$130 million specifically for the Davis-Grunsky Act Program. Proceeds from the sale of Water Bonds are deposited in the California Water Resources Development Bond Fund-Bond Proceeds Account, from which moneys may be expended only for the construction of project facilities and for the Davis-Grunsky Act Program.

Moneys deposited in the California Water Fund are appropriated for purposes of the Burns-Porter Act. Such deposits are derived from a portion of the State's tideland oil and gas revenues under a continuing authorization. In the past, the Legislature has acted both to decrease and increase the level of deposits. Money may be expended from the Fund only for the construction of project facilities and for the Davis-Grunsky Act Program.

About \$384 million of revenue bonds had been sold by the Department as of December 31, 1975—no additional revenue bonds were sold during 1975.

Future issues of revenue bonds are planned to supplement project financing. Proceeds from the sale of revenue bonds are deposited in the *Central Valley Water Project Construction Fund* from which money is expended only for purposes specified in the resolution authorizing such sale. These purposes in addition to construction costs include the payment of (1) bond interest during the construction period, and for one year following completion of construction, and (2) operating costs during a period of one year after completion of construction.

Miscellaneous receipts are deposited in the Central Valley Water Project Construction Fund and may be expended for (1) Water Bond interest and (2) construction of project facilities. Under the Department's financial management, miscellaneous receipts are first used during the early years of the Project to the extent needed for coverage of any Water Bond interest which exceeds available revenues.

Described below is the application of funds to capital expenditures under the financial analysis:

*Line 26: Application of California Water Fund Moneys.* The Burns-Porter Act provides that any available money in the California Water Fund shall be

used in lieu of proceeds from the sale of Water Bonds. When the Act became effective in late 1960, approximately \$97 million had been accumulated in the Fund. This balance and continuing annual appropriations to the Fund through June 28, 1968, financed a total of \$176 million of project construction costs. On June 28, 1968, SB 261 became effective (California Statutes of 1968, Chapter 411) which transferred the remaining balance to the Central Valley Water Project Construction Fund and deferred accruals to the California Water Fund until July 1, 1972. Since the latter date, appropriations again are being deposited in the California Water Fund in annual amounts of \$25 million.

The projected use of appropriations to the California Water Fund is shown in the financial analysis only to the extent required under current estimates of future construction expenditures. However, the Department expects that appropriations to the Fund would continue indefinitely in the full annual amounts now provided for by law. The Department also expects that transfers to the California Water Fund, to be derived from project revenues in excess of operating costs and Water Bond service, would be available for financing future capital expenditures—particularly, the long-range costs of additional conservation facilities and San Joaquin Drainage Facilities.

Under present California law, the State's annual tideland revenues are allocated in the following manner: approximately \$4 million to the General Fund; \$25 million to the California Water Fund; \$5 million to the Central Valley Water Project Construction Fund; and the remainder to capital outlay for higher education.

The financial analysis indicates that full annual appropriations of tideland revenues to the California Water Fund (and short-term interest earnings thereon, amounting to an estimated \$0.75 million annually) would be required for financing construction expenditures through 1996. While the Department expects that full annual appropriations would continue to be available to the Fund, the financial analysis indicates that required expenditures from the Fund would be less than \$25 million annually for the period 1997 through 1999, with no requirement thereafter. Commencing in 1980, annual repayments to the Fund (see Line 63, Spread 2) would supplement annual appropriations.

Finally, it is emphasized that the projected use of the California Water Fund is based on current estimates and assumptions as to the timing and magnitude of future capital costs. Such costs could change significantly with future events especially in regard to the nature and timing of additional conservation facilities and San Joaquin Drainage Facilities.

*Line 27: Application of Proceeds from Sale of Oroville Revenue Bonds.* All proceeds from sale of Oroville Revenue Bonds in April 1968 (Series A) and in April 1969 (Series B) had been applied as of December 31, 1973.

*Line 28: Application of Proceeds from Sale of Devil Canyon—Castaic Revenue Bonds.* Construction funds provided by the sale of Devil Canyon—Castaic Revenue Bonds, in August 1972, include (1) \$98.9 million which reimbursed other project funds used to finance construction of the Devil Canyon and Castaic Facilities prior to the delivery of the bonds; and (2) \$28.2 million which was reserved to complete construction of the Facilities. Shown in Line 28 is the projected use of funds so reimbursed for construction of works other than the Facilities and of funds reserved for future completion of the Facilities.

*Line 29: Application of Proceeds from Sale of Supplemental Revenue Bonds.* As previously indicated in Line 23, future revenue bond issues are assumed to provide \$629 million for application to the construction expenditures shown in this analysis and \$64 million to other special capital requirements. This amount is, in effect, a balancing item to complete the State Water Project as now contemplated. Future developments could reduce or increase this amount. It should also be noted that the assumptions regarding staging of the additional conservation facilities can have a significant effect on the need for supplemental bonds. If the first stage is larger than assumed, the need for supplemental bonds will increase—if it is less or construction is scheduled over a longer period of time, the need may decrease.

*Line 30: Application of Proceeds from Sale of Water Bonds, Davis—Grunsky Act Program.* For simplification, the \$130 million of capital expenditures authorized for the Davis—Grunsky Act Program under the Burns—Porter Act are shown to be funded solely by proceeds from the sale of Water Bonds. Actually, \$28.0 million of the California Water Fund was used for the Program in lieu of bond proceeds prior to 1969. This simplification does not in any way affect the validity of the analysis.

*Line 31: Application of Proceeds from Sale of Water Bonds, Additional Conservation Facilities.* The Burns—Porter Act provides that to the extent California Water Fund moneys are expended, an equal amount of proceeds from the sale of Water Bonds is reserved ("offset") for financing the construction of certain additional conservation facilities to be located in either or both the North Coastal area and the Sacramento Valley. In mid-1972, the maximum reservation of "offset" bonds was effectively limited to \$176 million—the total amount of California Water Fund moneys which had been expended up to that time. By mid-1972, all remaining Water Bond proceeds from the Burns—Porter authorization had either been "offset" or reserved for the Davis—Grunsky Act Program.

Under the analysis, all of the \$176 million reserved for additional conservation facilities would be expended by 1985. In order to finance the remaining portion of the additional conservation facilities, supplemental revenue bonds would be required as shown in Line 29.

*Line 32: Application of Proceeds from Sale of Water Bonds, Initial Project Facilities.* This application, completed in mid-1972, was limited to \$1.444 billion—i.e., the total \$1.75 billion Burns-Porter authorization less \$130 million reserved for the Davis-Grunsky Act Program and \$176 million "offset" for additional conservation facilities.

*Line 33: Total Application of Proceeds from Sale of Bonds.* The total of Lines 27 through 32. (See Table 9 for a summary of actual and projected bond sales, together with information concerning interest costs and principal maturities.)

*Line 34: Application of Miscellaneous Receipts to Construction.* Since the first call on miscellaneous receipts is to insure coverage of Water Bond interest, the estimated portion of receipts remaining for application to capital expenditures depends on an analysis, shown on Spread 2 of Table 7, of total available receipts and revenues in relation to operating costs and bond service requirements.

*Line 35: Total Financing of Capital Requirements.* This line—the total of Lines 26, 33, and 34—matches Line 25 and confirms that all capital expenditures would be funded under the analysis.

## Miscellaneous Receipts

Sources of miscellaneous receipts are described in the following paragraphs:

*Line 36: Federal Payments for Project Capital Expenditures.* The federal share of the State's capital expenditures includes payments for (1) "open-space" grants at certain project reservoirs, (2) costs of Lakes Oroville and Del Valle allocated to flood control under existing agreements and, under current expectations, (3) a share of the State's construction costs of the Delta Facilities under a future agreement. In the analysis, only the State's share of costs is included for works constructed by the United States, such as the San Luis joint-use facilities.

About \$1.6 million in federal payments has been received for acquisition costs of project and recreation lands reserved for open space at Lakes Perris and Del Valle and Castaic and Silverwood Lakes. The final payment for "open space" was received in 1975.

Federal payments received through December 31, 1975, for project costs allocated to flood control totaled \$73.1 million—\$68.2 million for Lake Oroville and \$4.9 million for Lake Del Valle. Line 36 includes an allowance for an additional \$0.9 million of payments for Lake Oroville. This additional amount is subject to revision after the Corps completes its final audit of the Department's records of joint costs.

Payments for Lake Del Valle are completed under the present agreement. While not included in Line 36, there is a possibility of an additional payment under a supplemental agreement (see page 5, Bulletin 132-72). The South Pacific Division, Corps of Engineers, released a public notice on February 9, 1973, on its review of the Del Valle flood control payments. The District Engineer found that modification of the Del Valle cost allocation was justified because of a substantial increase of costs and because economic patterns of development in the floodplain had changed from the original projection shown in Senate Document No. 128. As a result, the District Engineer recommended that the federal payment be increased by \$0.57 million. A review was conducted by the Office of Management and Budget (OMB) during 1975, with a recommendation that payment to the State *not* be increased. An omnibus civil works au-

thorization bill will be submitted to the House Committee on Public Works and Transportation during 1976. Even though OMB will not recommend the increase, the Corps of Engineers is preparing to send its Del Valle report to Congress for consideration in connection with the omnibus bill.

The amounts shown in Line 36 for 1978 and thereafter are for assumed federal financial participation in the Delta Facilities. In accordance with the Bureau of Reclamation's feasibility report on the Peripheral Canal as an addition to the federal Central Valley Project (approved by the Secretary of the Interior), construction costs of the joint-use Delta Facilities would be shared with the State on a 50-50 basis. The amounts shown in Line 36 are based on the assumption that congressional authorization for federal participation would be secured so that payments to the State would commence in 1978, based on a concurrent 50 percent share of the State's annual construction expenditures. "Catch-up" payments for joint costs incurred prior to 1978, together with accrued interest at the State's project interest rate, are assumed to be equally distributed during the three-year period 1978 through 1980. Such "catch-up" payments to the State would total about \$24 million.

In the event that congressional authorization is delayed, the Department expects that the Bureau of Reclamation by formal agreement would contract for the conveyance of federal Central Valley Project water through state Delta Facilities. It is possible that the contract under suitable circumstances could form the basis to support the issuance of revenue bonds to finance the federal portion of the costs. The Department will not construct the Delta Facilities without some form of financial participation by the Bureau.

*Line 37: Appropriations Prior to the Burns-Porter Act.* Year-to-year appropriations by the Legislature financed all capital expenditures prior to the effective date of the Burns-Porter Act; November 8, 1960. Expenditures so financed substantially ended in 1963 and totaled about \$11 million from the General Fund and \$88 million from the Investment Fund (succeeded by the California Water Fund in 1959). These

TABLE 9: BOND SALES AND PROJECT INTEREST RATES

Bond Sales	Date of Sale	Dollar-years (a)	Interest Cost (b)	Percent Interest Cost (c)	Project Interest Rate (d)
	(1)	(2)	(3)	(4)	(5)
<u>Actual Issues</u>					
\$50,000,000 Bond Anticipation Notes	11/21/63	26,944	531	1.970	1.970
\$100,000,000 Series "A" Water Bonds	2/18/64	3,402,000	119,750	3.520	3.508
\$50,000,000 Series "B" Water Bonds	5/ 5/64	1,726,000	60,986	3.533	3.516
\$100,000,000 Series "C" Water Bonds	10/ 7/64	3,452,000	123,764	3.585	3.544
\$100,000,000 Series "D" Water Bonds	2/16/65	3,497,900	122,403	3.499	3.531
\$100,000,000 Series "E" Water Bonds	11/23/65	3,497,900	130,029	3.717	3.573
\$100,000,000 Series "F" Water Bonds	6/ 8/66	3,497,900	137,359	3.927	3.638
\$100,000,000 Series "G" Water Bonds	11/22/66	3,497,900	143,788	4.111	3.711
\$100,000,000 Series "H" Water Bonds	3/21/67	3,497,900	129,261	3.695	3.709
\$100,000,000 Series "J" Water Bonds	7/18/67	3,497,900	143,199	4.094	3.754
\$100,000,000 Series "K" Water Bonds	11/14/67	3,497,900	163,887	4.685	3.853
\$150,000,000 Revenue Bonds, Oroville Division, Series "A"	4/ 3/68	5,228,700	270,289	5.197	-
\$100,000,000 Series "L" Water Bonds	7/11/68	3,497,900	166,918	4.772	3.941
\$100,000,000 Series "M" Water Bonds	10/22/68	3,497,900	169,989	4.860	4.021
\$94,995,000 Revenue Bonds, Oroville Division, Series "B"	4/ 1/69	3,423,460	195,902	5.767	-
\$46,761,000 Cumulative 1970 General Fund Borrowing; repaid 7/10/70	-	4,938	346	7.007	4.021
\$200,000,000 Series "N" and "P" Bond Anticipation Notes	6/16/70	200,000	11,660	5.830	4.030
\$100,000,000 Series "N" Water Bonds	2/ 2/71	3,447,900	190,292	5.519	4.148
\$100,000,000 Series "Q" Bond Anticipation Notes	3/10/71	100,000	2,349	2.350	4.143
\$100,000,000 Series "P" Water Bonds	4/21/71	3,397,900	193,377	5.691	4.255
\$150,000,000 Series "Q" and "R" Water Bonds	11/ 9/71	5,171,850	265,734	5.138	4.342
\$40,000,000 Series "S" Water Bonds	3/28/72	1,399,160	76,509	5.468	4.371
\$139,165,000 Devil Canyon-Castaic Revenue Bonds (e)	8/ 8/72	4,776,204	258,839	5.419	4.457
\$10,000,000 Series "T" Water Bonds	3/20/73	185,265	9,491	5.122	4.459
\$10,000,000 Series "U" Water Bonds	1/13/76	158,750	8,731	5.50	4.462
<u>Projected Issues</u>					
\$10,000,000 Series "V" Water Bonds	1/77	158,750	8,731	5.50	4.464
\$15,000,000 Series "W" Water Bonds	7/78	238,125	13,097	5.50	
\$182,000,000 Supplemental Revenue Bonds (f)	7/78	6,461,849	452,329	7.00	4.717
\$165,000,000 Series "X" Water Bonds (Offset)	7/83	5,771,535	317,434	5.50	
\$100,000,000 Supplemental Revenue Bonds (f)	7/83	3,549,194	248,444	7.00	4.885
\$200,000,000 Supplemental Revenue Bonds (f)	7/85	7,098,389	496,887	7.00	5.067
\$211,400,000 Supplemental Revenue Bonds (f)	7/90	5,971,764	418,023	7.00	5.198

a) A unit equivalent to one dollar of principal amount outstanding for one year, in thousands.

b) In thousands of dollars.

c) The total interest cost (without regard to premiums received) divided by the total dollar-years, expressed as a percent.

d) Determined by dividing cumulative interest costs by cumulative dollar-years, expressed as a percent. Excluding Central Valley Project Revenue Bonds, Oroville Division, which do not affect the calculation of the "project interest rate".

e) Bonds sold at a net interest cost of 5.446 percent. Net proceeds for financing construction costs plus bond discount amounting to \$126,893,000 are used for purposes of the project interest rate.

f) Net proceeds for financing construction costs plus bond discount are used for purposes of the project interest rate.

amounts exclude \$1.3 million from the Local Projects Assistance Fund which financed the Davis–Grunsky Act Program prior to \$130 million authorization of the Burns–Porter Act. While these special appropriations do not fit the general definition of “miscellaneous receipts” in that they were not deposited in the Central Valley Water Project Construction Fund, they are so classified herein for simplifying the presentation of the financial analysis.

*Line 38: Appropriations for Capital Costs Allocated to Recreation and Fish and Wildlife Enhancement.* In accordance with Public Resources Code Section 6217, \$5 million of the State’s tideland oil and gas revenues is deposited annually in the Central Valley Water Project Construction Fund for repayment of (1) costs of constructing multipurpose project facilities that are allocated to recreation and fish and wildlife enhancement and (2) costs of acquiring land for recreation developments associated with project facilities. As indicated in Table 8, such costs are now estimated to eventually total about \$151 million. The \$5 million annual appropriation would extend through about 2020 in order to reimburse the Project with interest—assuming that 26 percent of such costs would be financed by Water Bonds bearing an average interest cost of 4.5 percent.

Release of the \$5 million annual appropriation to the Department for expenditure is dependent on legislative enactment approving the costs reported annually by the Department. In 1975, the Department reported costs totaling over \$64.6 million, including \$9.6 million of accrued interest (Appendix D, “Costs of Recreation and Fish and Wildlife Enhancement”, Bulletin No. 132–75, April 1975). This was an increase of about \$1.5 million over the previous report (see page 9, Appendix D, Bulletin No. 132–75). Most of this increase was due to costs incurred in 1974 and interest accrued during 1974. By enactment of SB 1068 (California Statutes of 1975, Chapter 720), the Legislature approved the total increased amount, which will cover annual releases through the fiscal year 1977–78 appropriation.

Recreation and fish and wildlife costs which have not as yet been reported to the Legislature include those for the California Aqueduct system south of Dos Amigos Pumping Plant, Delta Facilities, releases of stored water from the Oroville Facilities required by Decision 1379 and Water Quality Standards, and additional conservation facilities. The costs for the California Aqueduct system south of Dos Amigos Pumping Plant and the releases from the Oroville Facilities are scheduled to be reported in 1977. The costs for the other facilities will be reported after construction is completed.

By Appendix D to Bulletin No. 132–76, April 1976, the Department reported an additional \$1.1 million—raising the total costs reported to the Legislature to over \$65.7 million. Most of this increase was due to costs incurred in 1975 and interest accrued during

1975. Beginning in 1977, the Department will submit bills to the Legislature every two years instead of annually as has been done in the past.

*Line 39: Appropriations Under SB 261 (1968).* By enactment of SB 261, June 28, 1968, the balance in the California Water Fund was transferred to the Central Valley Water Project Construction Fund, together with appropriations of tideland oil and gas revenues in the annual amounts of \$11 million through June 30, 1970, and \$25 million thereafter until June 30, 1972.

*Line 40: City of Los Angeles Payments for Castaic Power Development.* Under a 70-year contract executed September 2, 1966 (see page 12, Bulletin No. 132–67), the State constructed the Angeles Tunnel with a 30-foot diameter instead of with a 17-foot diameter as originally planned. In return, the City is constructing and will operate and maintain a 1,250-megawatt Castaic Powerplant and will supply the State without charge power equivalent in value to that which the State would have produced in its originally planned 214-megawatt plant.

The value of this substitute production is accounted for in a subsequent section as a credit to project operating costs in the same manner as other aqueduct power credits. In addition, the City has made certain payments, shown in Line 40, to ensure that the benefits of joint development are equally realized by both the State and the City. Neither the estimated capital expenditures for the Project nor the payments shown in Line 40 include amounts for the Castaic surge chamber—which was constructed by the State but directly financed by the City.

*Line 41: Water Contractor Advances for Construction of Requested Works.* In addition to the costs of local systems necessary for the distribution and use of project water, water supply contractors are required to finance, in advance, the construction costs of delivery structures (turnouts) and of any excess capacity the Department is requested to construct in project facilities. Advance payments for state construction requested by the contractors are summarized below.

Excess capacity may be requested for the purpose of increasing the instantaneous rates of water delivery over the “peaking” rates normally provided for by the contracts.

Advance payments for requested excess capacity are determined by contract formula so as to assure more than sufficient funds to cover the additional construction costs involved. A complete determination of the additional construction costs by the Department was pending as of December 31, 1975. For purposes of the financial analysis, the Department expects that such advance payment would exceed the additional construction costs involved, with interest, by about \$39 million. Credits for the assumed overpayments have been applied to reduce estimated project revenues which otherwise would be derived from water charges, described in a subsequent section.

(in millions)

**Requested Excess Capacity:**

• The Metropolitan Water District of Southern California:	
(a) for 188 cubic-foot per second excess capacity in reaches from Kettleman City to Junction of the West Branch .....	\$19.4
(b) for enlargement of Lake Perris above a basic capacity of 100,000 acre-feet .....	\$13.9
(c) for 787 cubic-foot per second excess capacity in the San Bernardino Tunnel .....	\$12.0
• San Gabriel Valley Municipal Water District:	
for 21 cubic-foot per second of excess capacity in the San Bernardino Tunnel .....	\$ 0.3
• Antelope Valley-East Kern Water Agency:	
for 19 cubic-foot per second excess capacity in the reaches of the West Branch from the Junction through Quail Facilities .....	\$ 0.3
Subtotal .....	\$45.9
Required advance payment of water charges by The Metropolitan Water District of Southern California for originally requested excess capacity in the West Branch, now classified as basic project capacity .....	
	\$16.3
Requested delivery structures constructed or to be constructed by the State .....	\$10.0
Total water supply contractor advances for state construction of requested works .....	\$72.2

The costs of requested excess capacity do not include expenditures incurred for strengthening the tunnel linings and siphons of the Tehachapi Crossing so as to accommodate a possible future 36 cubic metres per second (1,260-cubic-foot-per-second) increase in capacity—or of constructing East Branch canals so as to accommodate a possible future 20 cubic metres per second (700-cubic-foot-per-second) increase in supply. By agreement with the contractors, these particular costs are classified as basic project costs (see pages 22–23, Bulletin No. 132–67).

*Line 42: Investment Earnings on Unexpended Miscellaneous Receipts.* Normally, unexpended project funds are invested in the Surplus Money Investment Fund of the State Treasurer. Interest earnings during the last half of 1975 were at a rate of 6.79 percent per annum. For the financial analysis, the Department estimates that future interest earnings of the Fund will average 7.0 percent per annum.

However, Line 42 also includes the interest earnings on revenue bond proceeds used to reimburse prior Burns–Porter bond expenditures and unexpended Supplemental Bond proceeds. In 1973, the Department obtained approval of the Department of Finance for the investment of unexpended Devil Canyon–Castaic Revenue Bond proceeds in a special fund. The proceeds will be held for a predictable number of years, generally longer than the normal investments covered by the Surplus Money Investment Fund, and can realize a greater rate of return than Treasurer, is expected to yield a return of about 7.1 percent per annum and is so reflected in the amount shown in Line 42.

*Line 43: Total Miscellaneous Receipts.* The total of Lines 36 through 42.

**Project Operating Revenues**

Project operating revenues are deposited in two primary accounts: the *Central Valley Water Project Revenue Fund*, in which are placed all revenues pledged to revenue bonds, and the *California Water*

*Resources Development Bond Fund—Revenue Account*, in which are placed all other project operating revenues, including interest earnings on any unexpended proceeds from the sale of Water Bonds.

*Line 44: California Power Companies' Payments Under Oroville-Thermalito Power Sale Contract.* The Edward Hyatt and Thermalito Powerplants have a combined generating capacity of approximately 900,000 kilowatts and energy generation has averaged 2.8 billion kWh annually since 1970. Although 1975 was an above-average water year on the Feather River, energy generation was below average because some water inflows to Lake Oroville were used to refill the Lake after completion of the drawdown operation to permit work on the intake structure. As a result, the actual energy generation for 1975 was only 2.3 billion kWh.

All of the Hyatt-Thermalito power is sold under a 50-year contract dated November 29, 1967, to three electric utility companies (Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas and Electric Company). The revenues from the sale of Hyatt-Thermalito power are used to repay the \$245,000,000 of revenue bonds that were sold to finance construction of the facilities. The power is sold for a guaranteed annual payment of \$16,150,000 per year, plus a credit or debit adjustment to an energy account as determined by computer program which determines the annual theoretical energy based on Lake Oroville inflows. The energy adjustment is the amount by which the theoretical energy is more or less than 2.1 billion kWh. For 1975, 463 million kWh was credited into the energy account. As of December 31, 1975, the total energy account contains 5.6 billion kWh which has an equivalent value of \$14.5 million.

The Department is studying the possible withdrawal of Hyatt-Thermalito power from the companies, as permitted under the contract and the revenue bond resolution, in order to supply part of the future energy requirements of the project pumping plants.

For the financial analysis, the Department assumes that revenues from the sale or other disposal of Hyatt-Thermalito (Oroville) power will continue to be available to the Project after termination of the present contract (2017) under payment terms similar to the present contract. The project revenues shown in Line 44 include the fixed semiannual payments of \$8,075,000; revenues received for power used for project pumping prior to the "full operation" date; and estimated future net receipts under the operation of the energy adjustment accounts.

*Line 45: Water Contractor Payments Under Devil Canyon-Castaic Contract.* These payments by the six water contractors located below Devil Canyon and Castaic Facilities are equal to (1) the annual service of Devil Canyon-Castaic Revenue Bonds and (2) annual operating costs of the Facilities allocated to power generation (see page 2, Bulletin 132-73).

*Line 46: Contractor Payments (assumed) for Supplemental Revenue Bonds.* For this analysis, it is assumed that these payments would cover annual service on a future issue of revenue bonds which

would provide construction funds for certain of the remaining aqueduct facilities and the additional conservation facilities together with operating costs associated with such currently unspecified facilities. All revenue bonds issued after 1985 would be repaid by 2035.

*Line 47: Water Contractor Payments Under Long-term Water Supply Contracts.* Water supply contracts provide for payments of two general charges: (1) a Delta Water Charge and (2) a Transportation Charge.

The Delta Water Charge is assessed for each acre-foot of water the contractors are entitled to receive. The Charge is computed so as to return to the State during the contract term all appropriate costs of project conservation facilities, together with interest thereon. Project conservation facilities are defined as those facilities which conserve water, including Lake Oroville, Delta Facilities, additional conservation facilities, and San Luis Reservoir, together with a portion of the California Aqueduct leading to the Reservoir from the Delta. Current studies of operating ground water basins to provide for conservation of project water may result in an amendment of water supply contracts to include such facilities as conservation facilities. Costs allocated to flood control, recreation, and fish and wildlife enhancement are not paid under the water supply contracts. Both charges for power costs and credits for power revenues are included in the determination of the Delta Water Charge.

The Transportation Charge is computed so as to return to the State during the contract term the costs of the aqueducts necessary to deliver water to the respective contractors, together with interest thereon. Such costs exclude those allocated to flood control, recreation, and fish and wildlife enhancement. In addition, costs of the Devil Canyon and Castaic Facilities allocable to power are excluded from the Transportation Charge and are paid under the Devil Canyon-Castaic Contract. Similarly, under the assumptions of this analysis, costs of certain project facilities to be financed by supplemental revenue bonds would not be paid under the water supply contracts but would be paid under agreements yet to be negotiated.

Each year's costs of each aqueduct reach are allocated among contractors whose deliveries are or will be conveyed through that reach. For contractors with predominantly municipal and industrial water use, the allocated amounts of each year's construction expenditures are required to be repaid, together with interest, in 50 equal annual installments. For contractors with predominantly agricultural water use, allocated construction costs are repaid by a uniform charge per acre-foot of water entitlement, computed so as to return to the State during the contract term such costs with interest.

Operating costs are paid currently under the Transportation Charge. Construction costs under the Transportation Charge and all construction and annual operating costs under the Delta Water Charge are to be repaid with interest at the "project interest rate".

The project interest rate is determined as the weighted average of the rates paid on securities issued and loans obtained to finance project facilities, excluding Oroville Revenue Bonds. Under original contract provisions, the basis for determining the project interest rate was the weighted average of rates paid on Water Bond sales only. Under contract amendments executed in 1969, after issuance of Oro-

ville Revenue Bonds, the basis was expanded to include rates on all other securities sold and loans obtained thereafter for financing project facilities, including revenue bonds (see page 28, Bulletin No. 132-70). However, not all proceeds from the sale of revenue bonds are melded in the calculation of the project interest rate—only those proceeds applied to construction costs (the only application of general obligation bonds permitted by law) and those consumed in the bond discount (a component of the total interest cost of a revenue bond issue). Shown below is the percent of total proceeds from revenue bond issues which affect the actual and project calculation of the project interest rate:

Revenue Bond Proceeds	Devil Canyon-Castaic (actual)	Supplemental (assumed)
(in millions)		
Applied to construction costs	\$127.1	\$629.3
Less, portion of such proceeds derived from interest earnings prior to delivery of bonds	\$ 1.6	7.9
Plus, bond discount	\$ 1.4	6.9
Subtotal, proceeds included in calculating the Project Interest Rate	\$126.9	\$628.3
Principal amount of bonds	\$139.2	\$693.4
Percent total principal amount included in calculating the Project Interest Rate	91%	91%

Table 9 presents information basic to the calculation of actual and projected project interest rates.

A detailed development of water charges for each contractor is presented in Appendix B which is based on presently known conditions and supports the Department's determination of 1977 water charges—to be billed by July 1, 1976. However, there are the following significant differences between the projection of charges shown in Line 47 and the substantiation of 1977 charges shown in Appendix B:

Future capital costs shown in Appendix B are based on prices prevailing on December 31, 1975. Those shown in the financial analyses include allowances for future price escalation.

The project interest rate basic to charges shown in Appendix B includes actual bond sales at the time this report was prepared (4.462 percent). The project interest rate basic to the charges shown in Line 47 also reflects the projected bond sales shown in Table 9.

Pre-1977 charges shown in Appendix B represent what such charges should have been under presently known conditions. Pre-1977 charges shown in Line 47 are those actually paid under previously determined bills.

- Charges for 1977 and thereafter shown in Appendix B are unadjusted. Such charges shown in Line 47 include adjustments for any apparent overpayments or underpayments of pre-1977 charges and credits due to prepayments of the capital cost components which will result under various contract amendments involving excess aqueduct capacity.

- The charges shown in Appendix B are those which would apply in the absence of the Devil Canyon-Castaic contract or of any assumed arrangement permitting sale of supplemental revenue bonds. The charges shown in Line 47 exclude the costs covered by such actual and assumed agreements.

- The charges shown in Appendix B represent unadjusted billed amounts for the respective years. The amounts shown in Line 47 represent the payment of such charges, which lag billed amounts by one or more months. (For instance, certain payments or operating costs incurred during a particular year will actually accrue to the State during the early months of the following year.)

*Line 48: Federal Payments for Project Operating Costs.* Under the December 31, 1961, Agreement between the State and the United States, the Depart-



ment operates and maintains the San Luis joint-use facilities. Under the January 12, 1972, Supplement to the Agreement, the United States pays 45 percent of the costs incurred by the Department for these activities (excluding power costs). This percentage was reviewed in 1975, and will remain at 45 percent, subject to review again in 1980. The amounts shown in Line 48 are based on the assumption that the current percent federal share would be extended indefinitely.

Line 48 also includes an assumed 50 percent federal share of the joint operating costs of the Delta Facilities (also excluding power costs) as proposed in the Bureau's feasibility report on the Peripheral Canal.

*Line 49: Appropriations for Operating Costs Allocated to Recreation.* Under the Davis-Dolwig Act, the Legislature declared its intent that, except for funds provided pursuant to AB 12 (1966), the Department's budget shall include appropriations from the General Fund of moneys necessary for enhancement of fish and wildlife and for recreation in connection with state water projects. The \$5 million annual AB 12 appropriation (Line 38) is for repayment of construction expenditures—annual operating costs allocated to recreation and fish and wildlife enhancement are paid by annual General Fund appropriations.

*Line 50: Local Agency Payments Under Davis-Grunsky Loan Repayment Contracts.* As pointed out in the description of Line 22, \$41.7 million in loan applications had been approved as of December 31, 1975. The amounts shown in Line 50 are based on the assumption that \$19.1 million in future contracts would be approved—bringing estimated total loans under the \$130 million authorization (which excludes an initial loan of about \$1.3 million) to \$59.5 million (46 percent). All future loans are assumed to be repaid in 50 years at 2.5 percent interest, with an initial five-year deferment of principal repayment.

*Line 51: Miscellaneous Revenues.* Miscellaneous revenues include annual payments by the City of Los Angeles for a share of the maintenance costs of the Angeles Tunnel, interest earnings on unexpended proceeds from sale of Water Bonds, and other short-term investment earnings on project revenues. Based on experience to date, an allowance of \$2 million annually through 1999 is included in Line 51 to approximate these revenues.

*Line 52: Total Project Operating Revenues.* The total of Lines 44 through 51.

*Line 53: Total Miscellaneous Receipts and Project Operating Revenues.* The total of Lines 43 and 52.

### **Application of Revenues and Miscellaneous Receipts**

Revenues pledged to revenue bonds, deposited in the *Central Valley Water Project Revenue Fund*, are disbursed in accordance with resolutions authorizing the issuance of such bonds. All other operating revenues, deposited in the *California Water Resources Development Bond Fund—Revenue Account*, are disbursed in accordance with the following priorities of use as specified in the Burns-Porter Act:

- (1) Project operating costs.
- (2) Water Bond service.
- (3) Repayment of project expenditures from the California Water Fund.
- (4) Deposits to a reserve for future construction of the State Water Resources Development System—a system of facilities which may be added to under certain authorizations of the Legislature and designations by the Department as specified in the Burns-Porter Act, and which includes the State Water Project.

*Line 54: Carryover (+) and Application (–) of Miscellaneous Receipts and Revenues Held Temporarily in Reserve.* The only carryover of receipts and revenues from year to year concerns a temporary reserve to insure that future annual service on Water Bonds will be met. Receipts accruing after 1999—not need-

ed for either bond service or construction expenditures under this analysis—are included in Line 67 as being available for financing future construction of the State Water Resources Development System.

*Line 55: Project Operating Costs.* Historical and estimated project operating costs are presented in Table 10 by: (1) project facilities; (2) type of component costs; and (3) project purpose. Except for power costs, allowances for future long-term price escalation are not included in these estimates since such operating costs do not substantially affect the overall results of the financial analysis. (For the most part, changes of operating costs cause direct offsetting changes of operating revenues.)

Power costs are the largest single item of operating expense for the Project. Under full operating conditions, power costs are presently estimated at \$315 million annually, including costs of transmission service.

In 1975, approximately 4 billion kilowatthours were used in the operation of the Project. The energy requirements of the Project will continue to increase each year, ultimately reaching about 13 billion kilowatthours under full operation. In addition to project generating plants, energy is presently available from a number of sources including Bonneville Power Ad-

ministration, Canadian Entitlement Power (CEP), and the California Suppliers. The power rates for CEP and California Suppliers are fixed until April 1, 1983 (see the Litigation Section in Chapter I regarding a recent decision of the Public Utilities Commission regarding the fixed rates). Afterwards, power costs will escalate sharply when the existing power contracts expire or when revised rates become effective.

The Department is presently investigating all possible energy sources to provide adequate and reliable energy supplies for operation of the Project beginning in 1983. The long-term outlook continues to reflect sharply increasing costs of power in the future.

Pumping power cost and recovery power credits are shown in Table 10. The projected power costs beginning in 1983 are based on current estimates for future power resources. The Department continues to assume, for purpose of estimating future pumping power costs and recovery power credits, that project power sources after 1982 will include power from one or more geothermal power plants constructed and owned by the Department, or one or more thermal power plants cooperatively developed and financed by the Department with one or more electric utilities. (Nuclear power plants in which the Department has expressed an interest in participation will probably not be available for commercial operation prior to 1985.) The Department also assumes that such power developments will be financed by project revenue bonds. However, if power is not available from cooperatively developed projects and is purchased from others, pumping power costs after 1982 will be substantially higher than presently estimated.

*Line 56: Deposits to Special Reserves Under Revenue Bond Financing.* Only those deposits derived from project operating revenues and miscellaneous receipts are shown in this line.

In regard to Oroville Revenue Bonds, such deposits include the following:

Payments to the Department for energy and generating capability prior to April 1, 1969, under terms of interim letter agreements, and all other power revenues for a period of one year following completion of construction.

Payments to the Department from the energy adjustment account for net annual energy generation in excess of 2.1 billion kilowatthours.

Federal flood control contributions in the amount of \$2.4 million for allocated operations and maintenance costs.

In regard to Devil Canyon-Castaic Revenue Bonds, such deposits consist of about \$9.2 million to provide a reserve approximating maximum annual bond service. For this analysis, a proportionately similar reserve is assumed for Supplemental Revenue Bonds.

The ultimate effect of these reserves, together with interest earnings thereon, is to accelerate the last year that operating revenues are applied to revenue bond service. For simplicity, the operation of these reserves is ignored in the financial analysis.

*Lines 57-58: Payment of Service on Bonds Sold.* Tables 12 and 13 of Bulletin No. 132-72 show annual interest and principal payments on individual series sold prior to 1972—Oroville Revenue Bonds (Series A and B) and Water Bonds (Series A through R). Annual service on Devil Canyon-Castaic Revenue Bonds and Series S Water Bonds sold during 1972 is shown Table 10 of Bulletin No. 132-73. Table 10 of Bulletin No. 132-74 provides a summary of annual service on Series T Water Bonds. Series U Water Bonds were sold in January 1976. Annual service on these bonds is shown in Table 11 of this bulletin.

It should be noted that Line 57 also includes over \$0.3 million in interest payments to the General Fund for the temporary loan of \$46.8 million in 1970—repaid by proceeds from the sale of Series N Water Bonds.

*Lines 59-60: Assumed Payments of Service on Future Bond Sales.* Table 12 shows the projected annual service on future Supplemental Revenue Bonds and Water Bonds (Series V through X) under the assumptions of this analysis.

Assumptions concerning the service on future Supplemental Revenue Bonds are as follows:

- The net interest cost would average 7.0 percent.
- The service pattern would provide for no maturities during the first 10 years after issuance, with a final maturity 50 years after issuance.
- The final bond issue (sold in 1990) would have a final maturity 40 years after issuance.

Assumptions concerning the service on future Water Bonds are as follows:

- The net interest cost would average 5.5 percent.
- The service pattern would provide for no maturities during the first nine years after issuance, with a final maturity for Series V and W 20 years after issuance. The final sale of water bonds (Series X) for additional conservation facilities would have final maturity 50 years after issuance.

*Lines 61-62: Total Payments of Bond Service.* The total of interest payments shown on Lines 57 and 59 and the total of principal payments shown on Lines 58 and 60, respectively.

*Lines 63-64: Repayment of the California Water Fund.* The Burns-Porter Act requires that, after operation and maintenance and bond service requirements have been satisfied, project revenues shall be transferred to the California Water Fund as reimbursement to the Fund for moneys expended for construction of the State Water Resources Development System. For the financial analysis, the repayment

amounts through 1998, (Line 63), together with the \$25 million of tidelands revenue allocated each year to the California Water Fund are utilized for financing capital expenditures (Line 26). (The Burns–Porter Act provides a continuing appropriation of all money in the California Water Fund for this purpose.)

The financial analysis indicates that commencing in 1999 there will be no further need to expend money from the California Water Fund for construction of the System. The total amount of tidelands revenue (and interest earnings thereon) placed in the California Water Fund and expended for the System would be \$871 million. This amount is expected to be fully repaid by 2005 as shown in Line 64.

*Line 65: Application of Miscellaneous Receipts to Construction Expenditures.* This line matches Line 34. All projected annual accruals of miscellaneous receipts would be totally applied to Water Bond service and construction expenditures through 1999 under the financial analysis. After 1999 annual receipts would be reserved for financing future construction—shown in Line 67.

*Line 66: Subtotal, Repayment of Capital Financing.* This line is the subtotal of Lines 62, 63, 64, and 65. Under the assumptions of this analysis, Line 66 demonstrates the schedule by which the Project would eventually repay, with project income, all funds required to finance capital expenditures as shown in Line 35.

*Line 67: Reservation for Future Construction.* In accordance with the Burns–Porter Act, all project revenues in excess of project operating costs, Water Bond service, and California Water Fund repayment shall be deposited in a reserve account for financing future construction of the State Water Resources Development System. Also included in the amounts shown in Line 67 are those miscellaneous receipts (primarily reimbursements of capital costs allocated to recreation and fish and wildlife enhancement) which accrue too late to be applied to construction expenditures under this analysis.

Within the constraints of timing, accruals to the reserve could be available for financing additional project costs in the event contingencies occur, such as referred to at the beginning of this chapter. However, if additional costs were to be incurred in annual amounts preceding or exceeding the annual amounts shown in Line 67, the required use of full appropriations to the California Water Fund could extend well beyond 1996 (the last year of such full use as indicated in the analysis) and the eventual need for supplemental construction funds could exceed the amount projected in this analysis.

*Line 68: Total Application of Miscellaneous Receipts and Project Operating Revenues.* This summary of the application of revenues and receipts matches the total accruals of such moneys as shown in Line 53.

TABLE 10: PROJECT

(in thousands)

FEATURE	Calendar						
	1962- 1975	1976	1977	1978	1979	1980	1981
BY PROJECT FACILITY:							
Feather River Facilities	29,458	5,853	5,968	6,233	6,212	6,202	6,210
North Bay Aqueduct	439	52	59	65	63	100	107
Delta Facilities	0	0	0	0	0	0	0
South Bay Aqueduct	11,931	1,376	1,560	1,707	1,600	1,703	1,789
California Aqueduct:							
Main Line - Delta to A. D. Edmonston	79,722	19,224	20,409	21,378	22,953	22,329	24,225
Main Line - A. D. Edmonston to Lake Perris	30,112	12,299	13,432	15,221	14,382	15,458	17,055
West Branch	8,145	1,543	1,293	1,497	833	549	109
Coastal Branch	5,909	903	872	976	931	979	1,016
Additional Conservation Facilities:	0	0	0	0	0	0	0
Water Quality Monitoring Program - Sacramento-San Joaquin Delta	1,203	604	569	566	566	566	566
Davis-Grunsky Act Program (continuing administrative costs)	351	178	95	75	85	95	110
TOTAL OPERATING COSTS	167,270	42,032	44,257	47,718	47,625	47,981	51,187
BY COMPOSITION:							
Salaries and Expenses of Headquarters Personnel	81,056	11,285	10,758	10,531	10,483	10,462	10,472
Salaries and Expenses of Field Personnel	99,905	22,576	22,119	22,928	22,928	22,966	23,518
Pumping Power:							
Used by Pumping Plants	49,541	14,271	17,438	21,140	22,472	23,042	26,451
Produced by Recovery Plants	-9,613	-5,283	-6,073	-7,218	-8,550	-8,721	-9,479
Deposits to Replacement Reserves	4,627	900	900	900	900	919	1,020
Oroville-Thermalito Insurance Premiums	1,934	257	264	264	264	264	264
<u>Less</u> , Portion of Costs Incurred During Construction	-60,180	-1,974	-1,149	-827	-872	-951	-1,059
TOTAL OPERATING COSTS	167,270	42,032	44,257	47,718	47,625	47,981	51,187
BY PROJECT PURPOSE:							
Water Supply and Power Generation	146,090	37,280	39,546	42,878	42,761	43,180	46,165
Recreation and Fish and Wildlife Enhancement	7,839	2,053	1,988	2,103	2,120	2,048	2,251
Flood Control	245	12	14	15	15	15	16
Miscellaneous Purposes:							
Federal Share, San Luis and Delta Facilities	12,609	2,304	2,418	2,456	2,453	2,452	2,454
Other (Davis-Grunsky, Drainage, City of Los Angeles)	487	383	291	266	276	286	301
TOTAL OPERATING COSTS	167,270	42,032	44,257	47,718	47,625	47,981	51,187

# OPERATING COSTS

of dollars)

Year									TOTAL, 1962- 2035
1982	1983	1984	1985	1986- 1995	1996- 2005	2006- 2015	2016- 2025	2026- 2035	
6,244	6,258	6,204	6,211	62,134	62,357	62,489	62,489	62,489	403,011
247	426	525	579	6,640	7,832	8,725	10,287	10,403	46,579
1,982	1,925	1,837	4,228	37,875	39,394	40,367	40,666	40,764	209,038
1,887	5,447	5,560	5,596	52,883	53,550	55,104	55,410	55,402	312,505
23,082	68,237	72,740	72,688	976,227	1,201,745	1,307,595	1,342,889	1,347,363	6,622,806
17,492	58,228	69,530	72,086	959,617	1,221,082	1,330,324	1,397,794	1,400,422	6,644,534
564	-9,332	-13,963	-16,014	-264,030	-362,649	-398,998	-421,661	-417,816	-1,889,930
1,411	3,181	3,799	4,119	59,132	70,593	69,925	70,571	70,621	364,938
0	0	0	0	28,076	79,986	86,460	86,460	86,460	367,442
566	566	566	566	5,661	5,661	5,661	5,661	5,661	35,209
120	120	120	120	1,200	1,200	1,200	1,200	1,200	7,469
53,595	135,056	146,918	150,179	1,925,415	2,380,781	2,568,852	2,651,766	2,662,969	13,123,601
10,473	10,475	10,476	11,032	132,377	182,280	188,322	188,320	188,318	1,067,120
25,182	25,182	25,182	25,471	254,710	254,710	254,710	254,710	254,710	1,611,507
26,350	143,092	160,182	168,903	2,233,303	2,807,547	3,042,003	3,143,207	3,153,430	15,052,372
-9,703	-44,972	-49,796	-56,091	-703,816	-876,060	-929,774	-948,062	-947,080	-4,620,291
1,041	1,037	1,082	1,095	10,951	10,951	10,951	10,951	10,951	69,176
264	264	264	264	2,640	2,640	2,640	2,640	2,640	17,767
-12	-22	-472	-495	-4,750	-1,287	0	0	0	-74,050
53,595	135,056	146,918	150,179	1,925,415	2,380,781	2,568,852	2,651,766	2,662,969	13,123,601
47,551	127,599	139,174	142,666	1,847,483	2,302,478	2,489,651	2,574,072	2,584,775	12,653,349
2,421	3,809	4,123	3,756	40,570	40,916	41,777	40,270	40,770	238,814
16	46	46	47	414	384	387	387	387	2,446
3,296	3,291	3,264	3,399	33,836	33,891	33,925	33,925	33,925	209,898
311	311	311	311	3,112	3,112	3,112	3,112	3,112	19,094
53,595	135,056	146,918	150,179	1,925,415	2,380,781	2,568,852	2,651,766	2,662,969	13,123,601

TABLE 11: ANNUAL SERVICE ON BONDS SOLD AS OF JANUARY 31, 1976

(in thousands of dollars)

Calendar Year	Bonds Sold Through January 31, 1976									
	Series A through T Water Bonds		Oroville Revenue Bonds		Devil Canyon-Castaic Revenue Bonds		Series U Water Bond Sold 1/13/76		Total	
	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest
1964	0	3,333	0	0	0	0	0	0	0	3,333
1965	0	11,114	0	0	0	0	0	0	0	11,114
1966	0	16,742	0	0	0	0	0	0	0	16,742
1967	0	26,912	0	0	0	0	0	0	0	26,912
1968	0	37,760	0	3,876	0	0	0	0	0	41,636
1969	0	47,461	0	10,448	0	0	0	0	0	57,909
1970	0	53,291	0	13,145	0	0	0	0	0	66,436
1971	0	63,035	0	13,145	0	0	0	0	0	76,180
1972	0	69,148	1,260	13,112	0	0	0	0	1,260	82,260
1973	1,200	69,348	1,330	13,042	0	7,708	0	0	2,530	90,098
1974	3,000	69,533	1,400	12,969	0	7,708	0	0	4,400	90,210
1975	5,000	69,366	1,475	12,893	0	7,708	0	0	6,475	89,967
1976	7,000	69,133	1,555	12,811	0	7,708	0	275	8,555	89,927
1977	10,200	68,773	1,635	12,727	0	7,708	0	550	11,835	89,758
1978	12,700	68,284	1,725	12,637	0	7,708	0	550	14,425	89,179
1979	13,650	67,665	1,815	12,540	0	7,708	0	550	15,465	88,463
1980	16,050	66,941	1,915	12,441	0	7,708	0	550	17,965	87,640
1981	18,050	66,082	2,020	12,334	0	7,708	0	550	20,070	86,674
1982	19,250	65,135	2,130	12,221	0	7,708	0	550	21,380	85,614
1983	20,520	64,122	2,245	12,101	900	7,708	0	550	23,665	84,481
1984	21,785	63,042	2,365	11,982	955	7,647	0	550	25,105	83,221
1985	22,555	61,906	2,485	11,862	1,010	7,583	0	550	26,050	81,901
1986	23,320	60,728	2,605	11,737	1,070	7,515	510	536	27,505	80,516
1987	24,395	59,511	2,735	11,602	1,135	7,442	590	506	28,855	79,061
1988	25,510	58,240	2,870	11,464	1,205	7,366	670	471	30,255	77,541
1989	26,725	56,968	3,015	11,314	1,275	7,284	750	432	31,765	75,998
1990	27,805	55,692	3,175	11,152	1,355	7,198	830	388	33,165	74,430
1991	28,625	54,373	3,335	10,983	1,435	7,107	910	341	34,305	72,804
1992	29,395	53,034	3,510	10,806	1,520	7,010	990	288	35,415	71,138
1993	30,880	51,678	3,695	10,618	1,610	6,907	1,070	232	37,255	69,435
1994	32,305	50,262	3,885	10,421	1,705	6,799	1,150	171	39,045	67,653
1995	33,280	48,790	4,085	10,215	1,810	6,684	1,230	105	40,405	66,794
1996	34,370	47,279	4,300	9,996	1,920	6,561	1,300	36	41,890	63,872
1997	35,295	45,755	4,525	9,767	2,035	6,432	0	0	41,855	61,954
1998	36,675	44,226	4,760	9,524	2,155	6,295	0	0	43,590	60,045
1999	37,600	42,655	5,005	9,265	2,285	6,160	0	0	44,890	58,080
2000	38,890	41,033	5,280	8,987	2,420	6,040	0	0	46,590	56,060
2001	39,980	39,351	5,565	8,693	2,565	5,912	0	0	48,110	53,956
2002	41,120	37,620	5,865	8,384	2,720	5,773	0	0	49,705	51,777
2003	42,970	35,835	6,180	8,057	2,885	5,626	0	0	52,035	49,518
2004	45,160	33,957	6,520	7,714	3,055	5,470	0	0	54,735	47,141
2005	46,450	31,995	6,870	7,349	3,240	5,305	0	0	56,560	44,649
2006	47,740	29,971	7,245	6,968	3,435	5,130	0	0	58,420	42,069
2007	49,230	27,883	7,635	6,564	3,640	4,945	0	0	60,505	39,392
2008	51,220	25,727	8,050	6,138	3,860	4,749	0	0	63,130	36,614
2009	53,560	23,478	8,490	5,690	4,090	4,540	0	0	66,140	33,708
2010	55,250	21,134	8,950	5,216	4,335	4,319	0	0	68,535	30,669
2011	56,740	18,717	9,435	4,717	4,595	4,085	0	0	70,770	27,519
2012	58,530	16,216	9,945	4,192	4,875	3,837	0	0	73,350	24,245
2013	60,370	13,676	10,485	3,636	5,165	3,574	0	0	76,020	20,886
2014	57,900	11,244	11,055	3,051	5,475	3,303	0	0	74,430	17,598
2015	53,690	8,838	11,655	2,435	5,805	3,015	0	0	71,150	14,288
2016	46,130	6,626	12,290	1,782	6,150	2,710	0	0	64,570	11,118
2017	38,060	4,614	12,960	1,097	6,520	2,388	0	0	57,540	8,099
2018	25,350	2,980	13,665	371	6,910	2,045	0	0	45,925	5,396
2019	16,890	1,778	0	0	7,325	1,682	0	0	24,215	3,460
2020	17,320	934	0	0	7,765	1,298	0	0	25,085	2,232
2021	8,510	301	0	0	8,230	890	0	0	16,740	1,191
2022	1,800	48	0	0	8,725	458	0	0	10,525	506
TOTAL	1,550,000	2,361,273	244,995	466,191	139,165	283,872	10,000	8,731	1,944,160	3,120,067

TABLE 12: ANNUAL SERVICE ON ASSUMED FUTURE BOND SALES

(in millions of dollars)

Calendar Year	Series "V", "W", "X" (Offset) Water Bonds		Supplemental Revenue Bonds		Total Future Bond Sales	
	Principal	Interest	Principal	Interest	Principal	Interest
1977	0	0.3	0	0	0	0.3
1978	0	0.5	0	0	0	0.5
1979	0	1.4	0	12.7	0	14.1
1980	0	1.3	0	12.7	0	14.0
1981	0	1.4	0	12.8	0	14.2
1982	0	1.4	0	12.7	0	14.1
1983	0	1.4	0	12.7	0	14.1
1984	0	10.4	0	19.8	0	30.2
1985	0	10.5	0	19.7	0	30.2
1986	0	10.5	0	33.7	0	44.2
1987	0.5	10.3	0	33.8	0.5	44.1
1988	1.4	10.4	0	33.7	1.4	44.1
1989	1.6	10.4	0.9	33.7	2.5	44.1
1990	1.8	10.2	1.0	33.7	2.8	43.9
1991	1.9	10.0	1.0	48.3	2.9	58.3
1992	2.1	10.0	1.1	48.2	3.2	58.2
1993	4.0	9.9	1.2	48.2	5.2	58.1
1994	4.3	9.6	1.8	48.1	6.1	57.7
1995	4.5	9.4	1.9	48.0	6.4	57.4
1996	4.7	9.2	3.1	47.8	7.8	57.0
1997	5.1	8.9	3.3	47.6	8.4	56.5
1998	4.0	8.6	3.6	47.4	7.6	56.0
1999	2.1	8.5	3.7	47.2	5.8	55.7
2000	2.3	8.4	4.0	46.8	6.3	55.2
2001	2.3	8.2	4.5	46.6	6.8	54.8
2002	2.5	8.1	5.0	46.3	7.5	54.4
2003	2.6	8.0	5.6	46.0	8.2	54.0
2004	2.6	7.8	6.5	45.5	9.1	53.3
2005	2.8	7.7	7.3	45.1	10.1	52.8
2006	3.0	7.5	8.2	44.6	11.2	52.1
2007	3.0	7.4	9.0	44.0	12.0	51.4
2008	3.1	7.2	10.0	43.4	13.1	50.6
2009	3.3	7.0	10.9	42.6	14.2	49.6
2010	3.3	6.8	11.9	41.9	15.2	48.7
2011	3.5	6.7	12.9	41.0	16.4	47.7
2012	3.6	6.5	14.1	40.1	17.7	46.6
2013	3.8	6.3	15.2	39.1	19.0	45.4
2014	3.8	6.1	16.4	38.1	20.2	44.2
2015	4.0	5.9	17.6	37.0	21.6	42.9
2016	4.1	5.6	18.9	35.8	23.0	41.4
2017	4.3	5.4	20.3	34.5	24.6	39.9
2018	4.5	5.2	21.6	33.1	26.1	38.3
2019	4.6	4.9	23.1	31.5	27.7	36.4
2020	4.8	4.7	24.6	29.8	29.4	34.5
2021	5.0	4.4	26.2	28.2	31.2	32.6
2021	5.1	4.1	27.9	26.4	33.0	30.5
2023	5.3	3.9	29.7	24.4	35.0	28.3
2024	5.4	3.6	31.5	22.2	36.9	25.8
2025	5.8	3.3	33.5	20.0	39.3	23.3
2026	5.9	2.9	35.5	17.7	41.4	20.6
2027	6.1	2.6	37.8	15.1	43.9	17.7
2028	6.4	2.3	40.0	12.6	46.4	14.9
2029	6.6	1.9	28.7	9.9	35.3	11.8
2030	6.8	1.6	30.3	7.8	37.1	9.4
2031	7.1	1.2	16.8	5.7	23.9	6.9
2032	7.3	0.8	17.9	4.5	25.2	5.3
2033	7.4	0.4	19.3	3.3	26.7	3.7
2034	0	0	13.1	1.9	13.1	1.9
2035	0	0	15.0	1.0	15.0	1.0
TOTALS	190.0	338.9	693.4	1,756.0	883.4	2,094.9





## **APPENDIX B**

### **DATA AND COMPUTATIONS USED IN DETERMINING WATER CHARGES**

# APPENDIX B - DATA AND COMPUTATIONS USED IN DETERMINING WATER CHARGES

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## **APPENDIX B**

### **DATA AND COMPUTATIONS USED IN DETERMINING WATER CHARGES**

Statements of charges to be furnished by the State on or before July 1 of each year are described in Article 29(e) of the "Standard Provisions for Water Supply Contract", which provides that:

"...All such statements shall be accompanied by the latest revised copies of the document amendatory to Article 22 and of Tables B, C, D, E, F, and G of this contract, together with such other data and computations used by the State in determining the amounts of the above charges as the State deems appropriate."

Compliance with Article 29(e) requires a comprehensive annual redetermination of all water supply aspects of the State Water Project. This redetermination is provided for in Article 22(f), concerning the Delta Water Rate per acre-foot of future entitlements, and in Article 28, with regard to annual Transportation Charges for the entire project repayment period.

This appendix documents the redetermination for water charges to be paid by contractors during calendar year 1977 and is based on aspects of the State Water Project known January 1, 1976.

The Transportation Charges do not include certain credits from contractor payments under supplemental agreements including the following:

1. Payments for state construction of requested delivery structures which exceed actual construction costs of such structures.

2. Payments for state construction of requested excess capacity in project transportation facilities which exceed actual construction costs of such excess capacity.

3. Payments under the Devil Canyon-Castaic contract.

Transportation Charges for prior years, through 1975, do not equal those amounts actually paid by contractors under statements previously furnished by the State. Overpayments or underpayments of charges (differences between the redetermined amounts and those under statements previously furnished) are accumulated, with interest credits or debits, and are deducted from or added to the redetermined amounts of the Transportation Charge to be paid by respective contractors during 1977 (except for the capital cost component associated with agricultural use of Kern County Water Agency). These adjustment computations are shown in the attachments accompanying each contractor's statement of charges and are reflected in revised copies of Tables C through G of the contract, also furnished with the statement of charges.

The formula for computing the Delta Water Rate, Article 22(f), provides that all adjustments for prior overpayments or underpayments of the Charge are accounted for in redetermination of the Rate. Since the redetermined Rate applies to all future entitlements, such adjustments are effectively amortized during the remainder of the project repayment period. This appendix includes a determination of the Delta Water Rate for 1977.

This redetermination excludes charges associated with project water service other than the Delta Water Charge and the Transportation Charge. Other charges (and the manner by which such charges are treated herein) are:

Advances of funds pursuant to Article 24(d) of the Standard Provisions, for excess capacity constructed by the State at the request of contractors. (Information on required advances is included herein because these charges are covered in the July 1 statements. However, any advances which are projected to exceed the additional capital costs for such excess capacity in completed aqueduct reaches have not been credited to future capital cost components of the Transportation Charge. Application of these credits are shown in the copies of revised Tables D and G which are furnished with the statements of charges.)

Advances of funds pursuant to Article 10(d) of the Standard Provisions, for delivery structures (turn-outs) constructed by the State at the request of contractors. (Partial information is included herein concerning actual and projected capital costs of such delivery structures. Statements concerning these costs and data in support of such statements are furnished to the appropriate contractors at various times and are not part of the July 1 statements.)

### **Bases for Allocating Reimbursable Costs Among Contractors**

This section concerns how reimbursable costs of aqueduct reaches of the project transportation facilities are allocated among contractors for determining the Transportation Charge. Reimbursable costs of the project conservation facilities are not allocated directly among contractors. Conceptually, the Delta Water Charge is a unit commodity charge rather than a use-of-facilities charge.

Allocation of reimbursable costs of aqueduct reaches among contractors is based on two specific applications of the Proportionate Use of Facilities method:

Allocations of reimbursable capital costs and minimum OMP&R costs of each reach are based on the proportionate maximum use of that reach by respective contractors under planned conditions of full project development.

Allocations of reimbursable variable OMP&R costs of each reach are based on the proportionate actual annual use of that reach by the respective contractors.

Figure B-3, at the end of the text for this appendix, shows reaches in which reimbursable costs of project transportation facilities are allocated among contractors.

Payments for sale and service of surplus project water to entities other than contractors pursuant to Article 21 of the Standard Provisions. (Payments of such water are based on prices greater than the unit variable OMP&R costs involved. Net revenues resulting from "noncontractor" service are applied as described on page 24, Bulletin 132-71. Such prices are generally based on the unit rates shown in Table B-24.)

- Payments under the Devil Canyon-Castaic Contract for costs of the Devil Canyon and Castaic Facilities allocable to power generation. (Charges under the Contract are billed separately from those under the Water Supply Contract. The treatment of such charges in relation to redetermined Transportation Charges is shown in special attachments to the bills of the affected six contractors.)

The computational procedure and relationships among tabulations of this redetermination are outlined on Figure B-1. All B-tables indicated thereon are found at the end of the text for this appendix.

This appendix also documents payments, pursuant to amended Article 21 of the Standard Provisions, for the sale and service of surplus project water to contractors.

#### ***Proportionate Maximum Use of Facilities***

The derivation of ratios that represent the proportionate maximum use of each aqueduct reach by the respective contractors was last described in Bulletin 132-70. (See pages 103-106 for a description of the computational procedure; pages 116-117 for a summary of aqueduct reaches, reach delivery quantities, and reach capacities; and pages 118-173 for a detailed derivation of factors for each contractor and for each aqueduct reach.) Such factors are still valid—except for the first reach of the California Aqueduct and for reaches of the South Bay Aqueduct. Revised ratios for these reaches are described in Bulletin 132-72 (see pages 106-111) and account for certain contract amendments executed early in 1972 regarding South Bay Aqueduct use (see pages 33-34, Bulletin 132-73).

**Table B-1** presents a summary of all reach ratios currently applicable to reimbursable capital costs. **Table B-2** presents a corresponding summary applicable to reimbursable minimum OMP&R costs. Requested excess capacity is ignored in B-1 (since the associated capital costs are paid for on an incremental-cost basis and not a proportionate-use basis) but is accounted for in B-2.

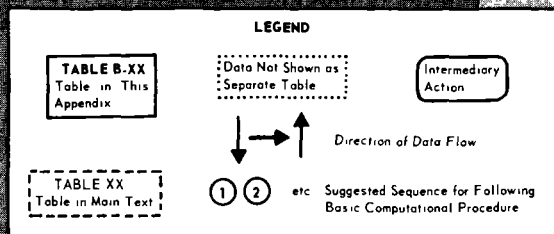
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### ***Proportionate Annual Use of Facilities***

Article 26(a) of the contract provides that the variable OMP&R component of the Transportation Charge shall return to the State those costs which are incurred in an amount which depends upon and varies with the amount of project water delivered to the contractor. (The minimum OMP&R component returns those operating costs which are incurred in an amount which does not vary with deliveries.) The Article goes on to explain that all such costs for a reach for a given year shall be allocated among contractors in proportion to the respective delivery quantities conveyed through the reach during the year.

Under the State's procedure, variable OMP&R costs originate with certain operating costs of project pumping and power recovery plants. These costs are incurred in amounts which generally vary with the total conveyance through the plants—not with just the portion for delivery to contractor turn-outs. In addition to direct deliveries, conveyance may include the following:

- (a) Water applied in down-aqueduct onshore recreation developments;
- (b) Water stored in the initial fill of down-aqueduct reservoirs;
- (c) Water lost through evaporation and seepage from down-aqueduct reaches and reservoirs; and
- (d) Water stored during a year in excess of storage withdrawals, subsequent to initial fill, in down-aqueduct reservoirs.

Under the State's procedure, certain operating costs for a plant for a given year are allocated among direct deliveries and (a) through (d) above in proportion to respective quantities conveyed through the plant during the year. Plant costs allocated to direct deliveries are designated as variable OMP&R costs to be repaid by contractors for the reach in which the plant is located. Remaining plant costs are allocated to the quantities (a) through (d) above and designated as follows:

- (a) A portion of joint OMP&R costs of the reach containing the plant allocated to recreation.
- (b) A portion of joint capital costs of respective down-aqueduct reservoirs.
- (c) and (d) A portion of joint minimum OMP&R costs of respective down-aqueduct reaches and reservoirs.

Concerning (d) above, in years when storage in down-aqueduct reservoirs is decreased for the purpose of making deliveries, associated variable OMP&R costs are established for the respective reservoirs with an offsetting credit applied to the minimum OMP&R costs of each. Such variable OMP&R costs are calculated to be equivalent to the original plant costs of conveying the water placed in

storage. Under current procedures, the unit cost of conveying water to storage is assumed to be equivalent to the unit cost of conveying water to the storage site in years when such storage is released.

***Special Treatment of Certain Plant Costs.*** As indicated in the preceding section, the State's procedure requires an initial apportionment of certain plant costs among capital cost, minimum OMP&R, and variable OMP&R components. This is based on annual quantities conveyed through respective plants for various down-aqueduct functions. Plant costs which are apportioned are summarized in **Table B-3** and include the following items:

- Costs of capacity and energy used, exclusive of associated power transmission and station service charges. (Transmission and station service costs are classified as minimum OMP&R costs.)
- Credits for capacity and energy produced at aqueduct power recovery plants (treated as negative costs).
- Annual payments to sinking fund reserves to finance periodic replacement of plant machinery components having economic lives shorter than the project repayment period.

Excluded from the above are costs for salaries of plant operations and maintenance personnel—classified as minimum OMP&R costs.

Also excluded from B-3 are plant capacity and energy costs associated with surplus water service after May 1, 1973. Prior to May 1, 1973, surplus water service was charged the same unit variable OMP&R component as entitlement water service. Prior to that date, surplus water deliveries are included in the "Deliveries—Water Supply" described in the following section.

Beginning May 1, 1973, the rate structure for surplus water service was significantly changed (see "Contract Amendments, Water Contracts Management", Chapter III). Capacity and energy costs of pumping plants assigned directly to surplus water service for 1975 are as follows: Delta, \$961,020; South Bay, \$86,598; Dos Amigos, \$439,992; Las Perillas and Badger Hill, \$92,199; Buena Vista, \$246,149; Wheeler Ridge, \$83,007; Wind Gap, \$24,039; and Edmonston, \$2,391 (see Bulletin 132-75 for 1974 amounts).

***Water Conveyance.*** **Table B-4** summarizes the schedules of annual entitlements as set forth in Table A of each contract. **Table B-5A** presents a summary of the actual and projected annual water quantities delivered and to be delivered from each aqueduct reach to each contractor. These water deliveries do not necessarily correspond with annual entitlements. (For a comparison of actual and projected deliveries v. annual entitlements, see Table 1, Chapter III.) **Table B-5B** presents a summary of actual and projected annual water quantities delivered and to be delivered to each contractor.

**Tabl B-6** summarizes the water quantities conveyed or to be conveyed through each aqueduct pumping plant or power plant for each year of the project repayment period and for each of the following functions:

Made available to contractors at down-aqueduct delivery structures ("Deliveries—Water Supply").

Required to initially fill down-aqueduct reaches and reservoirs to operational levels ("Initial Fill Water").

Consumed in down-aqueduct project-associated recreation developments ("Deliveries, Recreation").

Lost through evaporation and seepage from all down-aqueduct reaches ("Operational Losses").

● Placed in down-aqueduct reservoir storage subsequent to the initial fill of such storage ("Reservoir Storage Changes").

In addition, Table B-6 summarizes the net annual water amounts stored and to be stored in San Luis Reservoir (a project conservation facility with costs

reimbursed through the Delta Water Charge) and lost and to be lost through evaporation and seepage from the Reservoir and from the water conservation portion of the Aqueduct (all such quantities included under the heading "Conservation Water").

The Delta Pumping Plant is a joint project transportation-conservation facility. Under the State's procedure, power and replacement costs of the Delta Pumping Plant which are apportioned to the conveyance of annual "conservation water" quantities are transferred to the capital costs of San Luis Reservoir (during initial fill) or to the minimum OMP&R costs of San Luis Reservoir (subsequent to initial fill).

In years when releases from San Luis Reservoir cause a net annual storage depletion in order to make deliveries to contractors down-aqueduct therefrom, a portion of the minimum OMP&R costs of the Reservoir is transferred to the transportation variable OMP&R costs of the Delta Pumping Plant. This transfer is in an amount equal to the variable OMP&R cost per acre-foot of delivery through the Delta Pumping Plant for that year, multiplied by the acre-feet of deliveries derived from San Luis Reservoir storage for that year.

### Bases for Reimbursable Costs

Tables 8 and 10 (Chapter V) summarize the capital and OMP&R costs of all project facilities, respectively, and the allocation of these costs among the various project purposes. Allocation percentages are shown for each project facility in the tabulation below. For the most part, these percentages are prelim-

inary and subject to future revision and are applicable to the State's costs of the respective facilities. The redetermination in this appendix is concerned only with the costs of project facilities and are allocated to water supply and power generation.

Project Facilities	Water Supply and Power Generation		All Other Purposes (Nonreimbursable)	
	Capital Costs	Minimum OMP&R Costs	Capital Costs	Minimum OMP&R Costs
(in percent)				
<b>Conservation Facilities</b>				
Frenchman Dam and Lake	21.5	0	78.5	100.0
Antelope Dam and Lake	0	0	100.0	100.0
Grizzly Valley Dam and Lake Davis	5.1	8.8	94.9	91.2
Abbey Bridge Dam and Reservoir	0	0	100.0	100.0
Dixie Refuge Dam and Reservoir	0	0	100.0	100.0
Oroville Division <sup>(a)</sup>	97.1	99.0	2.9	1.0
California Aqueduct	96.5	94.1	3.5	5.9
Delta Facilities	86.0	86.0	14.0	14.0
Additional Conservation Facilities	90.0	90.0	10.0	10.0
<b>Transportation Facilities</b>				
California Aqueduct, excluding Coastal Branch	97.0	92.9	3.0	7.1
South Bay Aqueduct:				
Del Valle Dam and Lake Del Valle	25.2	22.0	74.8	78.0
North Bay Aqueduct	100.0	100.0	0	0

a) Percentages shown are applicable to the total costs of the Division excluding specific power costs of Edward Hyatt and Thermalito Powerplants and Switchyards. Federal reimbursements for flood control are treated as negative costs.



## Capital Costs

**Tabl B-7** presents a reconciliation of estimated total capital costs of each project conservation facility and each aqueduct reach as estimated for (a) the current financial analysis and (b) current redetermination of water charges.

*Costs of Delivery Structures.* Costs of delivery structures constructed by the State are paid directly by each contractor requesting such structures (see

pages 88 and 89, Bulletin 132-71 for a description of the method of payment for the capital costs of a delivery structure constructed by the State). Capital costs of all delivery structures constructed and to be constructed by the State are shown for each contractor in **Table B-8**. However, these costs are not to be construed as preliminary estimates or final invoices to be furnished by the State. The following tabulation indicates the general location and construction status of delivery structures requested as of the end of 1975.

Project Facility	Number of Delivery Structures					
	Requested by Agencies	Under Construction		Completed		Stub Only <sup>(a)</sup>
		by State	by Agencies	by State	by Agencies	
Oroville Area	6	0	0	0	4	2
North Bay Aqueduct (Phase I)	2	0	0	1	0	1
South Bay Aqueduct	19	0	1	8	5	5
California Aqueduct:						
North San Joaquin Division	5	0	1	0	4	0
San Luis Division (served by the federal Central Valley Project)						
South San Joaquin Division	44	0	4	9	21	10
Tehachapi Division	1	0	0	0	0	1
Mojave Division	16	0	1	0	3	12
Santa Ana Division	10	1	0	3	3	3
West Branch	5	0	0	1	1	3
Coastal Branch (Phase I)	3	0	0	1	2	0
TOTAL	111	1	7	23	43	37

a) Will be completed at a later date. Temporary facilities for delivery of water have been installed at several of the stubs.

*Costs of Requested Excess Capacity.* Amendments have been added to contracts of the following three agencies and provide for excess capacity in the project transportation facilities: The Metropolitan Water District of Southern California, San Gabriel Valley Municipal Water District, and Antelope Valley-East Kern Water Agency. Listed in **Table B-9** are estimates of the annual amounts for:

Additional costs incurred by the State for requested excess capacity.

Required annual advances, by water contractors, of funds for such costs.

- Any credits for advances estimated to be in excess of costs which will be applied to the respective contractor's accounts (generally, to the contractors' next installment of the capital cost component of the Transportation Charge).

Under Amendment 2 of Metropolitan's contract, 809 cubic feet per second of excess capacity originally was constructed in reaches of the West Branch at the District's request. Under Amendment 7, such capacity was reclassified as basic capacity of the project transportation facilities. This aspect of Amendment 7 required a \$16.3 million prepayment of the District's capital cost component of the Transportation Charge in lieu of advances of funds for the originally requested capacity.

Application of credits for contractor advances that are estimated to be in excess of actual costs and (concerning Metropolitan's Amendment 7) for prepayments of the capital cost component is shown in attachments to the respective statements of charges.

Amendment 5 of Metropolitan's contract includes a provision whereby additional costs to be incurred because of modifications to the Santa Ana Valley Pipeline, required for enlargement of Lake Perris, at the request of Metropolitan are to be allocated to the District and returned to the State through payments of the Transportation Charge. The estimated additional costs to be repaid through the District's capital cost component for the aqueduct reach from Devil Canyon Powerplant to Barton Road total \$6.7 million, as shown on page 98, Bulletin 132-72.

### **Annual Operating Costs**

Estimated operating costs allocable to water supply and power generation shown in Table 10 will be returned to the State through payments of the minimum and variable OMP&R components of Delta Water and Transportation Charges and through a portion of the revenues from electric power sales.

All reimbursable operating costs of conservation facilities are returned to the State through payments of the minimum OMP&R component of the Delta Water Charge.

Those operating costs to be reimbursed through payments of the variable OMP&R component of the Transportation Charge were previously described in the section entitled "Special Treatment of Certain Plant Costs". The remainder of this section centers on those costs to be reimbursed through payments of the minimum OMP&R component of the Transportation Charge.

**Minimum Operating Costs.** The following types of operating costs are considered to be incurred in annual amounts that do not vary with the water quantities delivered to the contractors and are therefore classified as minimum OMP&R costs:

- All direct labor charges for field operations and maintenance personnel, including associated indirect costs.
- Electric power transmission and station service costs.
- All costs for equipment, materials, and supplies and for replacement of works other than rotating machinery of pumping and power recovery plants.

Portions of the power and replacement costs of all up-aqueduct pumping plants and power plants that are allocable to the annual conveyance of water (a) lost to evaporation and seepage from respective aqueduct reaches, or (b) placed into storage in respective reservoirs of the project transportation facilities (after initial fill).

Credits, which offset those costs referred to in (b) above, for deliveries derived from reservoir storage.

- A distributed share of general and direct operating costs which cannot be identified solely with one facility or aqueduct reach.

Concerning the allocation of general operating costs among facilities and reaches, this redetermination follows the procedures described on pages 111-113, Bulletin 132-70.

### **Costs to be Returned to the State Through Payments Under the Transportation Charge and the Devil Canyon-Castaic Contract**

**Table B-10** presents the actual and projected annual capital costs of each aqueduct reach that will eventually be returned to the State, with interest, through contractor payments of the capital cost component under the Transportation Charge and of debt service under the Devil Canyon-Castaic Contract. The actual and projected costs to be reimbursed through payments of the minimum OMP&R component under the Transportation Charge and of allocated operating costs under the Devil Canyon-Castaic Contract are shown in **Table B-11**. Variable OMP&R costs, shown in **Table B-12**, are a portion of those costs shown in Table B-3 allocable to the water supply delivery quantities shown in Table B-6 and reimbursed through payments of the variable OMP&R component of the Transportation Charge.

### **Costs to be Returned Through Payments Under the Delta Water Charge and the Oroville Power Sale Contract**

Summarized in **Table B-13** are actual and projected capital and operating costs of project conservation facilities to be reimbursed through payments under (a) the Delta Water Charge, (b) Oroville power sales, and (c) San Luis power credits. Not included in Table B-13 are credits to be applied to the reimbursable capital costs of the project conservation facilities pursuant to negotiated settlements concerning the magnitude of incurred planning costs for the period 1952 through 1972 (see section entitled "Negotiation of Water Charge Settlements", Chapter III). These credits are as shown below:

Year	Credit	Year	Credit
Thru 1960	\$4,850,000	1967. . . \$	812,145
1961. . .	431,527	1968. . .	409,386
1962. . .	479,280	1969. . .	245,732
1963. . .	478,743	1970. . .	192,432
1964. . .	751,330	1971. . .	187,320
1965. . .	763,541	1972. . .	196,361
1966. . .	748,649	Total. . .	\$10,546,446

## Project Water Charges

This section summarizes the redetermination of past and projected components of the Transportation Charge for annual revision of Tables C through G that are included in each water contract. This section also includes a derivation of future unit Delta Water Rates. Equivalent unit charges for each acre-foot of entitlement water service are also summarized herein for (a) each contractor and (b) each aqueduct reach.

### Transportation Charges

The accumulation of allocated costs of each aqueduct reach to each contractor forms the basis for the annual components of the Transportation Charge.

**Allocated Capital Costs.** Table B-14 summarizes each contractor's share of the capital costs of aqueduct reaches presented in Table B-10, as determined by application of proportionate-use ratios set forth in Table B-1. The resulting allocated costs are to be set forth in Table C of the respective contracts.

Prepayments of the capital cost component, required under Metropolitan's Amendment 7, are shown as negative capital costs in Metropolitan's Table C and in Table B-14. Both Table B-14 and Tables C of the six contractors located below the Devil Canyon and Castaic Facilities include the capital costs that are reimbursable under the Devil Canyon-Castaic Contract.

**Capital Cost Components.** Criteria as to the types of amortization schedules applicable to the allocated capital costs for the respective contractors are summarized in Figure B-2. The accounting of interest charges included in the capital cost components of the Transportation Charge follows the procedure established in Settlement Letter No. 2.

**Table B-15** summarizes the capital cost components of the Transportation Charge for each contractor for each year of the project repayment period. These estimated components, subsequently adjusted for prior overpayments or underpayments, are set forth in Table D of the respective contracts. Credits for advance payment for excess capacity that exceeds actual costs of such capacity are applied to reduce the payment amounts set forth in Table D, but are ignored in Table B-15. Both Table B-15 and Tables D of the six Devil Canyon-Castaic contractors include the debt service payments due under the Devil Canyon-Castaic Contract.

**Minimum OMP&R Components.** Table B-16 summarizes the minimum OMP&R components of the Transportation Charge for each contractor for each year of the project repayment period. These estimated components, subsequently adjusted for prior overpayments or underpayments, are set forth in Tables E of the respective contracts. These components represent the accumulated share of the reach costs presented in Table B-11, as determined by application of the proportionate-use ratios shown for each reach and for each contractor in Table B-2.

Under operating agreements with Kern County Water Agency concerning the early installation of units by Berrenda Mesa Water District in Las Perillas and Badger Hill Pumping Plants (see page 7, Bulletin 132-71), the Agency is to be billed any additional operating costs caused by early installation of the units which would otherwise increase charges to downstream contractors. Under this requirement, the following minimum OMP&R costs of Reach 31A are assigned directly to the Agency with the remaining reach costs allocated by application of the proportionate-use ratios:

Year	Direct Charge	Year	Direct Charge
1969 . . .	\$ 46,222	1978 . . .	\$ 55,913
1970 . . .	46,306	1979 . . .	55,864
1971 . . .	139,391	1980 . . .	55,858
1972 . . .	93,386	1981 . . .	55,970
1973 . . .	71,005	1982 . . .	56,129
1974 . . .	98,292	1983 . . .	56,194
1975 . . .	123,066	1984 . . .	55,591
1976 . . .	110,065	1985 . . .	55,680
1977 . . .	51,760	Total . . .	\$1,226,692

Both Table B-16 and Tables E for the six Devil Canyon-Castaic contractors include the portion of operating costs payable under the Devil Canyon-Castaic Contract.

**Variable OMP&R Components.** Article 26(a) of the Standard Provisions specifies the following procedure for calculating the variable OMP&R component of the Transportation Charge:

- An annual charge per acre-foot of projected water deliveries to all contractors served from or through each reach is determined so as to return to the State the projected variable OMP&R costs to be incurred for each reach.
- The total annual variable OMP&R component for any contractor for a given reach is obtained by multiplying the unit charge associated with that reach by the quantity of water actually delivered from or through the reach to the contractor.

**Table B-17** presents a summary of actual and projected total variable OMP&R costs for each acre-foot of conveyance through each aqueduct pumping plant and power plant for each year of the project repayment period. The data summarized in Table B-17 have been derived by dividing the power costs (and credits) and replacement costs shown in Table B-12 by the delivery quantities shown in Table B-6.

However, certain costs included in Table B-12 for "extra peaking service", which would otherwise constitute variable OMP&R costs, are assigned directly to contractors requesting this type of service (see page 21, Bulletin 132-71, and Water Service Contract

**FIGURE B-2: CRITERIA FOR AMORTIZATION SCHEDULES**

Contractor	Amortization of Allocated Capital Costs in 50 Equal Annual Installments, With Initial Payment Due in:								
	1963	1964	1965	1966	1968	1970	1973	a	b
Alameda County FC&WCD, Zone 7	● c								
Alameda County WD	●								
Antelope Valley-East Kern WA	●								
Castaic Lake WA		●							
County of Butte									
County of Kings					●				
City of Yuba City									
Coachella Valley County WD		●							
Crestline-Lake Arrowhead WA		●							
Desert WA	● d								
Devil's Den WD								●	
Dudley Ridge WD								●	
Empire West Side ID								●	
Hacienda WD								●	
Kern County WA: Ag use								●	
M&I use			●						
Little Rock Creek ID		●							
Mojave WA		●							
Napa County FC&WCD				●					
Oak Flat WD								●	
Palmdale WD		●							
Plumas County FC&WCD						●			
San Bernardino Valley MWD	●								
San Gabriel Valley MWD	● d								
San Geronio Pass WA	● d								
San Luis Obispo County FC&WCD		● e							
Santa Barbara County FC&WCD		● e							
Santa Clara Valley WD	●								
Solano County FC&WCD							●		
The Metropolitan WD-SC	●								
Tulare Lake Basin WSD								●	
Ventura County FCD		●							

- a Amortization of allocated capital costs on basis of equivalent unit rate applied to annual entitlements (Table B-4) within project repayment period.  
b Payments on Delta Water Charge only.  
c Principal payments on each annual capital cost prior to 1971 delayed until calendar year 1972, except payments for 1963.  
d Deferred and added to 1964 payment with accrued interest.  
e Exception: all principal and interest payments for costs of "Coastal Stub" are assumed deferred until 1976.

tors Council Memo No. 593, July 10, 1970). These costs are not allocated in accordance with annual delivery quantities and are excluded from the unit charges shown in Table B-17. Extra peaking charges for additional power capacity are as shown below:

Year	Agency	Pumping Plant	
		Dos Amigos	Las Perillas and Badger Hill
(dollars)			
1972	Kern County W.A.	\$9,553	\$24,700
	Hacienda W.D.	10	0
1973	Kern County W.A.	0	6,016
1974	Kern County W.A.	0	7,140
1975	Kern County W.A. (estimated)	1,000	6,000

**Table B-18** summarizes the variable OMP&R components of the Transportation Charge for each contractor and for each year of the project repayment period. Table B-18 is developed from the costs per acre-foot as shown in Table B-17 and the delivery quantities for each contractor from each reach as shown in Table B-5, plus any costs for "extra peaking service". These estimated components, subsequently adjusted for prior overpayments or underpayments, are to be set forth in Table F of the respective contracts.

**Total Annual Transportation Charges.** Annual Transportation Charges for each contractor are summarized in **Table B-19**. (The amounts shown in Table B-19 represent the sums of the corresponding amounts shown in Tables B-15, B-16, and B-18.) These estimated payments, subsequently adjusted for prior overpayments or underpayments, are to be set forth in Table G of the respective contracts. Both Table B-19 and Table G for the six Devil Canyon-Castaic contractors include debt service and operating cost payments due under the Devil Canyon-Castaic Contract.

### ***Delta Water Rates per Acre-Foot of Entitlement***

Calculation of future Delta Water Rates applicable after December 31, 1976, are shown in **Table B-20** in accordance with the amended Articles 22(e) and 22(g) of 29 contracts. Under the amended articles, future construction and operating costs of each additional and supplemental conservation facility will be included in the calculation of the Rate in years when the State first incurs major construction costs. Calculation of the Rate due under the two contracts which have not as yet been amended (Yuba City, and Solano County Flood Control and Water Conservation District) is shown in a special attachment to the respective bills.

### ***Total Transportation and Delta Water Charges***

The total charge to each contractor consists of the sum of the Total Delta Water Charge and the Total Transportation Charge.

**Total Annual Delta Water Charges.** Annual Delta Water Charge for each contractor is summarized in **Table B-21**. Table B-21 is developed from the total rate per acre-foot as shown in Table B-20 and the entitlement water for each contractor as shown in Table B-4.

**Total Annual Transportation and Delta Water Charges.** Total annual transportation and total Delta Water Charges are summarized in **Table B-22**. Table B-22 summarizes the total charge to each contractor by combining Table B-19 and Table B-21.

### ***Equivalent Total Water Charges***

A summary of total charges is shown in **Table B-23** in terms of the equivalent charge for each acre-foot of project water now estimated to be delivered as entitlement water to the respective contractors. These equivalent charges would provide the same total sum at the end of the project repayment period as annual payments to be made under the Delta Water Charge and Transportation Charge, including interest at the project interest rate. These equivalent unit charges do not reflect the future service of surplus water. The potential charges for surplus water service will be considerably less than the charges for entitlement water. Furthermore, the Table B-23 values account for the fact that current estimates of future entitlement water service are noticeably less than the amounts shown in Tables A for certain Southern California contractors.

### ***Equivalent Water Cost, by Reach***

**Table B-24** presents a summary of the equivalent unit costs of conveying entitlement water through respective aqueduct reaches of the project transportation facilities. These unit costs provide basis of charges to be assessed (a) for certain "extra serv-

ice" (such as for delivery of entitlements down-aqueduct from a contractor's turnout) and, together with the Delta Water Charge per acre-foot, (b) for surplus water service to entities other than long-term water supply contractors. It should be noted that the cumulative unit conveyance costs shown for reaches in Table B-24 do not necessarily equal the equivalent unit Transportation Charges to contractors served from such reaches. This is because the unit charges of Table B-23 account for the rates of water demand buildup and cost allocation factors of the respective contractors, whereas the unit costs of Table B-24 meld together the effect of the respective buildups and allocation criteria of all contractors whose entitlements are conveyed through a given reach.

### ***Surplus Water Service***

**Actual and Projected Deliveries.** The contracts under which surplus water service has been provided since May 1, 1973, require a different scheduling procedure than that used in the scheduling of entitlement water. Approved monthly surplus water delivery schedules are issued on December 1 for the first four months of the following year and on May 1 for the last eight months of that year. This procedure allows scheduling for the period beginning May 1 to be based on fairly reliable information concerning water supply. The contracts also require the contractors to submit schedules indicating the desired amounts of surplus water for each month during the subsequent six-year period on or before October 1 each year.

**Table B-25** shows the quantities of surplus water delivered to long-term contractors during the period May 1, 1973, through December 31, 1975. **Table B-28** shows projected surplus water deliveries for each year of the period 1976 through 1981, based on a lower quartile water supply being available. Contractors' requested deliveries for the years 1978 through 1981 had to be reduced, using methods prescribed in the contract, to conform with the estimated total quantity of surplus water which could be delivered during those years with a lower quartile water supply. If the water supply in the year of delivery is greater than lower quartile, increased deliveries may be made to reflect contractor requests. However, if the water supply in the year of delivery is less than lower quartile, further reductions will be made.

Prior to press time, it was apparent that the 1976 water supply was far below that which would be available in a lower quartile water supply year. Consequently, the 1976 and projected 1977 quantities shown in Table B-28 will have to be modified.

Article 21(g) (e) of the amended surplus water provisions requires under certain conditions that surplus water be reclassified to entitlement water so that the quantity of entitlement water delivered during the year equals the quantity of surplus water up

to a total amount not to exceed 150% of the maximum annual entitlement. The surplus water quantities shown in Table B-25 reflect such reclassification while those in Table B-28 do not.

*Surplus Water Costs.* **Table B-26** shows the actual power costs by components, capacity and energy, at each pumping plant associated with the surplus water deliveries shown in Table B-25. **Table B-29** shows the estimated total power costs which would be incurred by the State in making the projected surplus water deliveries shown in Table B-28.

*Surplus Water Charges.* Since May 1, 1973, surplus water charges have been computed pursuant to provisions of the annual surplus water contracts which are the same as in the surplus water amendments offered to all contractors for signature in 1974 (see pages 31-32, Bulletin 132-74). Prior to May 1, 1973, the charges were based on unit rates which were equivalent to the transportation variable component unit rates (see Table B-17). **Table B-27** shows contractors' actual power, replacement, and administrative charges associated with the quantities of surplus water shown in Table B-25. Power capacity charges are based on an allocation of each month's capacity costs at each pumping plant. A contractor's allocated share of the monthly capacity cost is in proportion to either the contractor's surplus water scheduled at the time the commitment was made for power capacity or the amount actually delivered through the plant in that month, whichever is greater. A contractor's energy charge at each pumping plant is in the same proportion to total energy costs for pumping surplus water for the year as the contractor's surplus water pumped during the year (eight months in 1973) is to the total surplus

water pumped at the respective pumping plant for the year. The replacement charge to each contractor is a function of the time rotating equipment at the pumping plant is operated to pump surplus water. Each contractor's allocated share of the State's total surplus water administrative costs for the year is in proportion to either the total surplus water scheduled for the year as shown on the approved December 1 and May 1 schedules or the total delivered during the year, whichever is greater.

**Table B-30** shows the estimated power rates at each pumping plant related to the projected quantities of surplus water shown in Table B-28.

The surplus water contracts as well as amended Article 21 of the long-term contracts provide that the State can order power for pumping specified quantities of surplus water in a future year or years if there is a written commitment from a contractor or contractors to pay the costs of such power. A contractor may make such a commitment in order to be assured that the lowest possible priced power will be available for pumping its surplus water. A commitment of this type, however, does not provide the contractor with a greater right or priority to receive surplus water than contractors which have not made commitments.

Several contractors made such commitments in late 1973, 1974, and 1975 and, in response thereto, the State ordered power estimated to be necessary to pump the quantities of surplus water requested for the years 1978 through 1981. **Table B-31** shows for each of those contractors the surplus water quantities requested and the financial obligations which have been incurred as a result of the power ordered.

Figure B-3: REPAYMENT REACHES AND DESCRIPTIONS  
PROJECT TRANSPORTATION FACILITIES

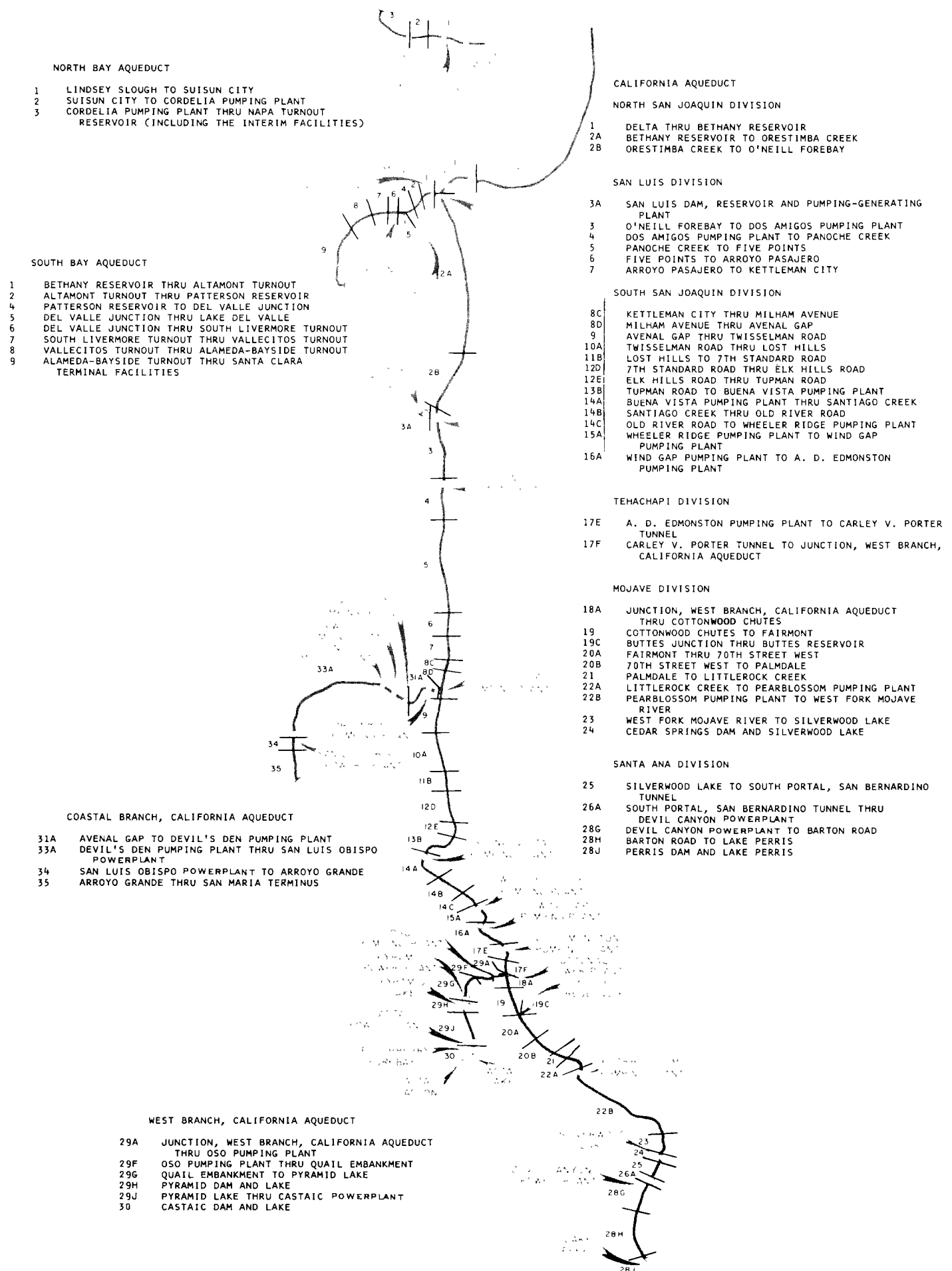


TABLE B-1: FACTORS FOR DISTRIBUTING

Reach No.	Reach Description	NORTH BAY AREA		SOUTH BAY AREA				TOTAL
		Napa County FC&WCD	Solano County FC&WCD	Alameda County FC&WCD Zone 7	Alameda County Water District	Santa Clara Valley Water District	Future Contractor	
North Bay Aqueduct								
1	Lindsey Slough to Suisun City	.39808876	.60191124					1.00000000
2	Suisun City to Cordelia Pumping Plant	.39808861	.60191139					1.00000000
3	Cordelia Pumping Plant thru Napa Turnout Reservoir (Including the interim facilities)	1.00000000						1.00000000
South Bay Aqueduct								
1	Bethany Reservoir thru Altamont Turnout			.22599621	.20663014	49237700	07499665	1.00000000
2	Altamont Turnout thru Patterson Reservoir			.22599657	.20663057	49237791	07499495	1.00000000
4	Patterson Reservoir to Del Valle Junction			.19504791	.21450021	51113252	07931936	1.00000000
5	Del Valle Junction thru Lake Del Valle			.14436367	.12972254	33715573	38875806	1.00000000
6	Del Valle Junction thru South Livermore Turnout			.14599918	.21144710	50574745	13680627	1.00000000
7	South Livermore Turnout thru Vallecitos Turnout			.25176680	.60218448		14604872	1.00000000
8	Vallecitos Turnout thru Alameda-Bayside Turnout			.06294980	.72065355		21639665	1.00000000
9	Alameda-Bayside Turnout thru Santa Clara Terminal Facilities					1.00000000		1.00000000
California Aqueduct								
1	Delta Thru Bethany Reservoir			00954802	.00872976	02080260	.00342519	— — —

Reach No.	Reach Description	CENTRAL COASTAL AREA				SOUTHERN			
		San Luis Obispo County FC&WCD	Santa Barbara County FC&WCD	Antelope Valley-East Kern Water Agency	Castaic Lake Water Agency	Coachella Valley County Water District	Crestline Lake Arrowhead Water Agency	Desert Water Agency	
California Aqueduct									
1	Delta Thru Bethany Reservoir	.00531147	.01240007	.02939503	.00890866	.00528393	.00133630	.00871425	
2A	Bethany Reservoir to Orestimba Creek	.00555266	.01296315	.03072975	.00931319	.00552151	.00139640	.00910607	
2B	Orestimba Creek to O'Neill Forebay	.00555876	.01297741	.03076360	.00932344	.00552915	.00139833	.00911867	
3	O'Neill Forebay to Dos Amigos Pumping Plant	.00555769	.01297494	.03075777	.00932168	.00552856	.00139818	.00911771	
4	Dos Amigos Pumping Plant to Panoche Creek	.00555659	.01297235	.03075165	.00931982	.00552794	.00139801	.00911670	
5	Panoche Creek to Five Points	.00555520	.01296912	.03074401	.00931751	.00552717	.00139780	.00911543	
6	Five Points to Arroyo Pasajero	.00555311	.01296424	.03073244	.00931400	.00552602	.00139750	.00911351	
7	Arroyo Pasajero to Kettleman City	.00555243	.01296267	.03072873	.00931287	.00552565	.00139740	.00911289	
8C	Kettleman City thru Milham Avenue	.00555159	.01296069	.03072405	.00931145	.00552517	.00139729	.00911211	
8D	Milham Avenue thru Avenal Gap	.00566628	.01322842	.03135878	.00950380	.00564073	.00142650	.00930269	
9	Avenal Gap thru Twisselman Road			.03437577	.01041812	.00618845	.00156502	.01020599	
10A	Twisselman Road thru Lost Hills			.03492681	.01058510	.00628966	.00159061	.01037292	
11B	Lost Hills to 7th Standard Road			.03848657	.01166387	.00694140	.00175542	.01144773	
12D	7th Standard Road thru Elk Hills Road			.04046660	.01226391	.00730484	.00184732	.01204709	
12E	Elk Hills Road thru Tupman Road			.04052108	.01228042	.00731580	.00185010	.01206514	
13B	Tupman Road to Buena Vista Pumping Plant			.04397523	.01332721	.00794772	.00200991	.01310729	
14A	Buena Vista Pumping Plant thru Santiago Creek			.04618687	.01399742	.00835456	.00211281	.01377821	
14B	Santiago Creek thru Old River Road			.04702647	.01425185	.00851020	.00215218	.01403490	
14C	Old River Road to Wheeler Ridge Pumping Plant			.04846557	.01468794	.00877627	.00221947	.01447369	
15A	Wheeler Ridge Pumping Plant to Wind Gap Pumping Plant			.04927653	.01493368	.00892667	.00225752	.01472172	
16A	Wind Gap Pumping Plant to A.D. Edmonston Pumping Plant			.05113510	.01549688	.00927016	.00234437	.01528820	
17E	A.D. Edmonston Pumping Plant to Carley V. Porter Tunnel			.05355379	.01622984	.00971819	.00245767	.01602709	
17F	Carley V. Porter Tunnel to Junction, West Branch, Calif. Aqueduct			.05366827	.01626453	.00973908	.00246295	.01606154	
18A	Junction, West Branch, Calif. Aqueduct thru Cottonwood Chutes			.13238112		.02399390	.00606794	.03957043	
19	Cottonwood Chutes to Fairmont			.13237766		.02399451	.00606810	.03957141	
19C	Buttes Junction thru Buttes Reservoir			1.00000000					
20A	Fairmont thru 70th Street West			.06847931		.02576424	.00651572	.04249001	
20B	70th Street West to Palmdale			.02276024		.02702916	.00683554	.04457607	
21	Palmdale to Littlerock Creek			.02318953		.02754716	.00696650	.04543034	
22A	Littlerock Creek to Pearblossom Pumping Plant			.01181870		.02794143	.00706620	.04608043	
22B	Pearblossom Pumping Plant to West Fork Mojave River					.02827552	.00715073	.04663153	
23	West Fork Mojave River to Silverwood Lake					.00324449	.00818121	.00535117	
24	Cedar Springs Dam and Silverwood Lake					.01024605	.01251569	.01690478	
25	Silverwood Lake to South Portal, San Bernardino Tunnel								
26A	South Portal, San Bernardino Tunnel thru Devil Canyon Pwp								
28G	Devil Canyon Powerplant to Barton Road								
28H	Barton Road to Lake Perris								
28J	Perris Dam and Lake Perris								
29A	Junction, West Branch, Calif. Aqueduct thru Oso Pumping Plant				.02736564				
29F	Oso Pumping Plant thru Quail Embankment				.02736563				
29G	Quail Embankment to Pyramid Lake				.02736564				
29H	Pyramid Dam and Lake				.02646380				
29J	Pyramid Lake thru Castaic Powerplant				.02736563				
30	Castaic Dam and Lake				.02637131				
31A	Avenal Gap to Devil's Den Pumping Plant	.10522767	.24566277						
33A	Devil's Den Pumping Plant thru San Luis Obispo Powerplant	.29988697	.70011303						
34	San Luis Obispo Powerplant to Arroyo Grande	.20553239	.79446761						
35	Arroyo Grande thru Santa Maria Terminal	.14771038	.85228962						



# REACH CAPITAL COSTS AMONG CONTRACTORS

Reach No	SAN JOAQUIN VALLEY AREA								
	Devil's Den Water District	Dudley Ridge Water District	Empire West Side Irrigation District	Hacienda Water District	Kern County Water Agency		County of Kings	Oak Flat Water District	Tulare Lake Basin Water Storage District
					Municipal and Industrial	Agricultural			
California Aqueduct									
1	.00377824	.01707931	.00088687	.00251598	.02742075	.30633444	.00090702	.00167139	.03253706
2A	.00394038	.01781205	.00092491	.00262393	.02864590	.31948963	.00094755	.00174305	.03393294
2B	.00395099	.01786013	.00092740	.00263102	.02869073	.32034362	.00094904		.03402458
3	.00395208	.01786513	.00092766	.00263176	.02868919	.32043064	.00094900		.03403409
4	.00395323	.01787039	.00092794	.00263254	.02868758	.32052214	.00094893		.03404410
5	.00395466	.01787693	.00092828	.00263352	.02868559	.32063639	.00094886		.03405659
6	.00395684	.01788685	.00092879	.00263498	.02868255	.32080926	.00094875		.03407550
7	.00395753	.01789003	.00092896	.00263544	.02868158	.32086471	.00094872		.03408157
8C	.00395842	.01789405	.00092918	.00263603	.02868035	.32093468	.00094867		.03408923
8D	.00404591	.01828966		.00269431	.02928494	.32802221			.01551611
9					.03214521	.32838224			
10A					.03267760	.31755652			
11B					.03609912	.24768443			
12D					.03801001	.20879251			
12E					.03807068	.20769413			
13B					.01464596	.16664965			
14A					.00622935	.13374077			
14B					.00634719	.11790931			
14C					.00654829	.09078926			
15A					.00666217	.07549599			
16A					.00692172	.04047416			
17E					.00213551				
31A	.07364766					.57546190			

## CALIFORNIA AREA

Reach No.	Littlerock Creek Irrigation District	Mojave Water Agency	Palmdale Water District	San Bernardino Valley Municipal Water District	San Gabriel Valley Municipal Water District	San Geronimo Pass Water Agency	The Metropolitan Water District of Southern California	Ventura County Flood Control District	TOTAL
1	.00049187	.01101303	.00369180	.02363192	.00650450	.00398446	.43940274	.00429334	1.00000000
2A	.00051421	.01151300	.00385943	.02469456	.00679800	.00416362	.45932582	.00448829	1.00000000
2B	.00051477	.01152575	.00386368	.02472869	.00680672	.00416938	.45985090	.00449324	1.00000000
3	.00051469	.01152359	.00386296	.02472604	.00680580	.00416893	.45976953	.00449238	1.00000000
4	.00051459	.01152131	.00386218	.02472327	.00680482	.00416846	.45968397	.00449149	1.00000000
5	.00051448	.01151846	.00386122	.02471980	.00680361	.00416788	.45957712	.00449037	1.00000000
6	.00051428	.01151416	.00385978	.02471455	.00680178	.00416698	.45941544	.00448869	1.00000000
7	.00051421	.01151278	.00385931	.02471286	.00680118	.00416671	.45936361	.00448816	1.00000000
8C	.00051414	.01151103	.00385874	.02471072	.00680044	.00416634	.45929816	.00448747	1.00000000
8D	.00052475	.01174889	.00393847	.02522753	.00694206	.00425349	.46880430	.00458017	1.00000000
9	.00057523	.01287942	.00431739	.02767698	.00761389	.00466647	.51396901	.00502081	1.00000000
10A	.00058444	.01308595	.00438661	.02812957	.00773752	.00474279	.52223261	.00510129	1.00000000
11B	.00064401	.01442004	.00483371	.03104405	.00853455	.00523416	.57558975	.00562119	1.00000000
12D	.00067713	.01516215	.00508241	.03266922	.00897860	.00550817	.60527969	.00591035	1.00000000
12E	.00067804	.01518261	.00508926	.03271816	.00899157	.00551643	.60610827	.00591831	1.00000000
13B	.00073586	.01647710	.00552311	.03554404	.00976456	.00599288	.65787670	.00642278	1.00000000
14A	.00077287	.01730602	.00580090	.03736328	.01026125	.00629961	.69105032	.00674576	1.00000000
14B	.00078692	.01762074	.00590636	.03805925	.01045073	.00641694	.70365858	.00686838	1.00000000
14C	.00081102	.01816015	.00608712	.03924903	.01077498	.00661754	.72526114	.00707853	1.00000000
15A	.00082461	.01846415	.00618901	.03992156	.01095807	.00673092	.73744044	.00719696	1.00000000
16A	.00085571	.01916080	.00642247	.04145755	.01137676	.00698987	.76533787	.00746838	1.00000000
17E	.00089617	.02006742	.00672629	.04346097	.01192239	.00732766	.80165539	.00782162	1.00000000
17F	.00089809	.02011032	.00674067	.04355438	.01194797	.00734341	.80337045	.00783834	1.00000000
18A	.00221525	.04960424	.01662681	.10730447	.02944861	.01809192	.57469531		1.00000000
19	.00221522	.04960300	.01662640	.10730706	.02944877	.01809230	.57469557		1.00000000
19C									1.00000000
20A	.00237800	.05324853	.01784830	.11522151	.03161800	.01942666	.61700972		1.00000000
20B	.00249470	.05586076	.01872390	.12087842	.03316988	.02038045	.64729088		1.00000000
21	.00254199	.05692052		.12319478	.03380326	.02077093	.65963499		1.00000000
22A		.05773081		.12495765	.03428607	.02106816	.66905055		1.00000000
22B		.05842136		.12645206	.03469615	.02132008	.67705257		1.00000000
23				.14467449	.03969012	.02439238	.77446614		1.00000000
24				.22243002	.04339444	.02843498	.66607404		1.00000000
25				.14947726	.03997502	.02520426	.78534346		1.00000000
26A				.14947726	.03997502	.02520426	.78534346		1.00000000
28G				.05126137			.94873863		1.00000000
28H							1.00000000		1.00000000
28J							1.00000000		1.00000000
29A							.95944607	.01318829	1.00000000
29F							.95944608	.01318829	1.00000000
29G							.95944609	.01318827	1.00000000
29H							.96446829	.00906791	1.00000000
29J							.95944608	.01318829	1.00000000
30							.96499830	.00863039	1.00000000
31A									1.00000000
33A									1.00000000
34									1.00000000
35									1.00000000

TABLE B-2: FACTORS FOR DISTRIBUTING REACH

Reach No.	Reach Description	NORTH BAY AREA		SOUTH BAY AREA				TOTAL
		Napa County FC&WCD	Solano County FC&WCD	Alameda County FC&WCD Zone 7	Alameda County Water District	Santa Clara Valley Water District	Future Contractor	
North Bay Aqueduct								
1	Lindsey Slough to Suisun City	.39808876	.60191124					1.00000000
2	Suisun City to Cordelia Pumping Plant	.39808861	.60191139					1.00000000
3	Cordelia Pumping Plant thru Napa Turnout Reservoir (Including the interim facilities)	1.00000000						1.00000000
South Bay Aqueduct								
1	Bethany Reservoir thru Altamont Turnout			.22599621	.20663014	.49237700	.07499665	1.00000000
2	Altamont Turnout thru Patterson Reservoir			.22599657	.20663057	.49237791	.07499495	1.00000000
4	Patterson Reservoir to Del Valle Junction			.19504791	.21450021	.51113252	.07931936	1.00000000
5	Del Valle Junction thru Lake Del Valle			.14436367	.12972254	.33715573	.38875806	1.00000000
6	Del Valle Junction thru South Livermore Turnout			.14599918	.21144710	.50574745	.13680627	1.00000000
7	South Livermore Turnout thru Vallecitos Turnout				.25176680	.60218448	.14604872	1.00000000
8	Vallecitos Turnout thru Alameda-Bayside Turnout				.06294980	.72065355	.21639665	1.00000000
9	Alameda-Bayside Turnout thru Santa Clara Terminal Facilities					1.00000000		1.00000000
California Aqueduct								
1	Delta Thru Bethany Reservoir			.00954802	.00872976	.02080260	.00342519	— — —

Reach No.	Reach Description	CENTRAL COASTAL AREA			SOUTHERN				
		San Luis Obispo County FC&WCD	Santa Barbara County FC&WCD	Antelope Valley-East Kern Water Agency	Castaic Lake Water Agency	Coachella Valley County Water District	Crestline Lake Arrowhead Water Agency	Desert Water Agency	
California Aqueduct									
1	Delta Thru Bethany Reservoir	.00531147	.01240007	.02939503	.00890866	.00528393	.00133630	.00871425	
2A	Bethany Reservoir to Orestimba Creek	.00555266	.01296315	.03072975	.00931319	.00552151	.00139640	.00910607	
2B	Orestimba Creek to O'Neill Forebay	.00555876	.01297741	.03076360	.00932344	.00552915	.00139833	.00911867	
3	O'Neill Forebay to Dos Amigos Pumping Plant	.00555769	.01297494	.03075777	.00932168	.00552856	.00139818	.00911771	
4	Dos Amigos Pumping Plant to Panoche Creek	.00555659	.01297235	.03075165	.00931982	.00552794	.00139801	.00911670	
5	Panoche Creek to Five Points	.00555520	.01296912	.03074401	.00931751	.00552717	.00139780	.00911543	
6	Five Points to Arroyo Pasajero	.00555311	.01296424	.03073244	.00931400	.00552602	.00139750	.00911351	
7	Arroyo Pasajero to Kettleman City	.00555243	.01296267	.03072873	.00931287	.00552565	.00139740	.00911289	
8C	Kettleman City thru Milham Avenue	.00549671	.01283255	.03042012	.00921937	.00546665	.00138249	.00901561	
8D	Milham Avenue thru Avenal Gap	.00560860	.01309375	.03103938	.00940703	.00557923	.00141095	.00920128	
9	Avenal Gap thru Twisselman Road			.03398205	.01029883	.00611262	.00154585	.01008094	
10A	Twisselman Road thru Lost Hills			.03451663	.01046082	.00621064	.00157063	.01024262	
11B	Lost Hills to 7th Standard Road			.03796305	.01150525	.00684053	.00172991	.01128139	
12D	7th Standard Road thru Elk Hills Road			.03987187	.01208371	.00719023	.00181834	.01185809	
12E	Elk Hills Road thru Tupman Road			.03992309	.01209924	.00720053	.00182095	.01187505	
13B	Tupman Road to Buena Vista Pumping Plant			.04324825	.01310695	.00780756	.00197447	.01287616	
14A	Buena Vista Pumping Plant thru Santiago Creek			.04536499	.01374841	.00819606	.00207273	.01351685	
14B	Santiago Creek thru Old River Road			.04616419	.01399059	.00834387	.00211013	.01376063	
14C	Old River Road to Wheeler Ridge Pumping Plant			.04753265	.01440528	.00859629	.00217396	.01417689	
15A	Wheeler Ridge Pumping Plant to Wind Gap Pumping Plant			.04830162	.01463830	.00873855	.00220995	.01441151	
16A	Wind Gap Pumping Plant to A.D. Edmonston Pumping Plant			.05006206	.01517177	.00906311	.00229201	.01494676	
17E	A.D. Edmonston Pumping Plant to Carley V. Porter Tunnel			.05234459	.01586347	.00948480	.00239865	.01564222	
17F	Carley V. Porter Tunnel to Junction, West Branch, Calif. Aqueduct			.05245356	.01589650	.00950462	.00240367	.01567491	
18A	Junction, West Branch, Calif. Aqueduct thru Cottonwood Chutes			.13238112		.02399390	.00606794	.03957043	
19	Cottonwood Chutes to Fairmont			.13237766		.02399451	.00606810	.03957141	
19C	Buttes Junction thru Buttes Reservoir			1.00000000					
20A	Fairmont thru 70th Street West			.06847931		.02576424	.00651572	.04249001	
20B	70th Street West to Palmdale			.02276024		.02702916	.00683554	.04457607	
21	Palmdale to Littlerock Creek			.02318953		.02754716	.00696650	.04543034	
22A	Littlerock Creek to Pearblossom Pumping Plant			.01181870		.02794143	.00706620	.04608043	
22B	Pearblossom Pumping Plant to West Fork Mojave River					.02827552	.00715073	.04663153	
23	West Fork Mojave River to Silverwood Lake					.00324449	.00818121	.00535117	
24	Cedar Springs Dam and Silverwood Lake					.01024605	.01251569	.01690478	
25	Silverwood Lake to South Portal, San Bernardino Tunnel								
26A	South Portal, San Bernardino Tunnel thru Devil Canyon Pwp.								
28C	Devil Canyon Powerplant to Barton Road								
28H	Barton Road to Lake Perris								
28J	Perris Dam and Lake Perris								
29A	Junction, West Branch, Calif. Aqueduct thru Oso Pumping Plant			.00304299	.02728237				
29F	Oso Pumping Plant thru Quail Embankment			.00304379	.02728234				
29G	Quail Embankment to Pyramid Lake				.02736564				
29H	Pyramid Dam and Lake				.02646380				
29J	Pyramid Lake thru Castaic Powerplant				.02736563				
30	Castaic Dam and Lake				.02637131				
31A	Avenal Gap to Devil's Den Pumping Plant	.10522767	.24566277						
33A	Devil's Den Pumping Plant thru San Luis Obispo Powerplant	.29988697	.70011303						
34	San Luis Obispo Powerplant to Arroyo Grande	.20553239	.79446761						
35	Arroyo Grande thru Santa Maria Terminal	.14771038	.85228962						

# MINIMUM OMP&R COSTS AMONG CONTRACTORS

Reach No	SAN JOAQUIN VALLEY AREA								
	Devil's Den Water District	Dudley Ridge Water District	Empire West Side Irrigation District	Hacienda Water District	Kern County Water Agency		County of Kings	Oak Flat Water District	Tulare Lake Basin Water Storage District
					Municipal and Industrial	Agricultural			
California Aqueduct									
1	.00377824	.01707931	.00088687	.00251598	.02742075	.30633444	.00090702	.00167139	.03253706
2A	.00394038	.01781205	.00092491	.00262393	.02864590	.31948963	.00094755	.00174305	.03393294
2B	.00395099	.01786013	.00092740	.00263102	.02869073	.32034362	.00094904		.03402458
3	.00395208	.01786513	.00092766	.00263176	.02868919	.32043064	.00094900		.03403409
4	.00395323	.01787039	.00092794	.00263254	.02868758	.32052214	.00094893		.03404410
5	.00395466	.01787693	.00092828	.00263352	.02868559	.32063639	.00094886		.03405659
6	.00395684	.01788685	.00092879	.00263498	.02868255	.32080926	.00094875		.03407550
7	.00395753	.01789003	.00092896	.00263544	.02868158	.32086471	.00094872		.03408157
8C	.00390372	.01764649	.00091632	.00259956	.02836376	.31651560	.00093819		.03361753
8D	.00398843	.01802948		.00265599	.02895222	.32337797			.01529539
9					.03173493	.32315570			
10A					.03225002	.31237849			
11B					.03555316	.24304304			
12D					.03738966	.20458362			
12E					.03744664	.20348854			
13B					.01437747	.16288986			
14A					.00610657	.13050491			
14B					.00621833	.11497394			
14C					.00640883	.08842321			
15A					.00651639	.07347673			
16A					.00676126	.03933051			
17E					.00208231				
31A	.07364766					.57546190			

## CALIFORNIA AREA

Reach No.	Littlerock Creek Irrigation District	Mojave Water Agency	Palmdale Water District	San Bernardino Valley Municipal Water District	San Gabriel Valley Municipal Water District	San Geronimo Pass Water Agency	The Metropolitan Water District of Southern California	Ventura County Flood Control District	TOTAL
1	.00049187	.01101303	.00369180	.02363192	.00650450	.00398446	.43940274	.00429334	1 00000000
2A	.00051421	.01151300	.00385943	.02469456	.00679800	.00416362	.45932582	.00448829	1 00000000
2B	.00051477	.01152575	.00386368	.02472869	.00680672	.00416938	.45985090	.00449324	1 00000000
3	.00051469	.01152359	.00386296	.02472604	.00680580	.00416893	.45976953	.00449238	1 00000000
4	.00051459	.01152131	.00386218	.02472327	.00680482	.00416846	.45968397	.00449149	1 00000000
5	.00051448	.01151846	.00386122	.02471980	.00680361	.00416788	.45957712	.00449037	1 00000000
6	.00051428	.01151416	.00385978	.02471455	.00680178	.00416698	.45941544	.00448869	1 00000000
7	.00051421	.01151278	.00385931	.02471286	.00680118	.00416671	.45936361	.00448816	1 00000000
8C	.00050905	.01139703	.00382056	.02444913	.00673013	.00412224	.46619410	.00444309	1 00000000
8D	.00051940	.01162908	.00389834	.02495260	.00686817	.00420714	.47575203	.00453354	1 00000000
9	.00056864	.01273174	.00426793	.02733801	.00752279	.00460932	.52108733	.00496332	1 00000000
10A	.00057757	.01293209	.00433508	.02777635	.00764260	.00468324	.52938182	.00504140	1 00000000
11B	.00063524	.01422367	.00476795	.03059311	.00841338	.00515814	.58274744	.00554474	1 00000000
12D	.00066717	.01493906	.00500769	.03215687	.00884093	.00542180	.61234745	.00582351	1 00000000
12E	.00066803	.01495830	.00501413	.03220286	.00885312	.00542956	.61318897	.00583099	1 00000000
13B	.00072369	.01620441	.00543178	.03491750	.00959625	.00588725	.66464178	.00631662	1 00000000
14A	.00075911	.01699773	.00569765	.03665478	.01007092	.00618017	.69750337	.00662575	1 00000000
14B	.00077249	.01729729	.00579803	.03731574	.01025102	.00629159	.70996969	.00674247	1 00000000
14C	.00079540	.01781020	.00596992	.03844447	.01055888	.00648190	.73127981	.00694231	1 00000000
15A	.00080829	.01809845	.00606653	.03908064	.01073222	.00658915	.74327706	.00705461	1 00000000
16A	.00083775	.01875830	.00628766	.04053195	.01112817	.00683383	.77068316	.00731170	1 00000000
17E	.00087593	.01961383	.00657438	.04241764	.01164221	.00715176	.80626315	.00764506	1 00000000
17F	.00087775	.01965466	.00658807	.04250630	.01166651	.00716671	.80794577	.00766097	1 00000000
18A	.00221525	.04960424	.01662681	.10730447	.02944861	.01809192	.57469531		1 00000000
19	.00221522	.04960300	.01662640	.10730706	.02944877	.01809230	.57469557		1 00000000
19C									1 00000000
20A	.00237800	.05324853	.01784830	.11522151	.03161800	.01942666	.61700972		1 00000000
20B	.00249470	.05586076	.01872390	.12087842	.03316988	.02038045	.64729088		1 00000000
21	.00254199	.05692052		.12319478	.03380326	.02077093	.65963499		1 00000000
22A		.05773081		.12495765	.03428607	.02106816	.66905055		1 00000000
22B		.05842136		.12645206	.03469615	.02132008	.67705257		1 00000000
23				.14467449	.03969012	.02439238	.77446614		1 00000000
24				.22243002	.04339444	.02843498	.66607404		1 00000000
25				.11825184	.03722720	.01993915	.82458181		1 00000000
26A				.14947726	.03997502	.02520426	.78534346		1 00000000
28G				.05126137			.94873863		1 00000000
28H							1.00000000		1 00000000
28J							1.00000000		1 00000000
29A							.95652648	.01314816	1 00000000
29F							.95652573	.01314814	1 00000000
29G							.95944609	.01318827	1 00000000
29H							.96446829	.00906791	1 00000000
29J							.95944608	.01318829	1 00000000
30							.96499830	.00863039	1 00000000
31A									1 00000000
33A									1 00000000
34									1 00000000
35									1 00000000

TABLE B-3: POWER COSTS AND CREDITS AND ANNUAL REPLACEMENT

(in

Calendar Year	NORTH BAY AQUEDUCT		SOUTH BAY AQUEDUCT	CALIFORNIA					
	Reach 1	Reach 3	Reach 1	Reach 1	Reach 4	Reach 14A	Reach 15A	Reach 16A	Reach 17E
	Calhoun and Travis Pumping Plants	Cordelia Pumping Plant (b)	South Bay and Del Valle Pumping Plants (c)	Delta Pumping Plant	Dos Amigos Pumping Plant	Buena Vista Pumping Plant	Wheeler Ridge Pumping Plant	Wind Gap Pumping Plant	A.D. Edmonston (Tehachapi) Pumping Plant
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1962	0	0	38,130	0	0	0	0	0	0
1963	0	0	58,871	0	0	0	0	0	0
1964	0	0	75,239	0	0	0	0	0	0
1965	0	0	146,297	0	0	0	0	0	0
1966	0	0	198,643	0	0	0	0	0	0
1967	0	0	229,629	26,982	0	0	0	0	0
1968	0	7,128	342,761	1,324,777	239,505	0	0	0	0
1969	0	8,557	279,751	855,304	143,403	0	0	0	0
1970	0	13,666	448,383	368,508	217,820	2,940	0	0	0
1971	0	10,626	422,057	597,946	229,306	156,540	23,021	18,577	29,067
1972	0	14,430	623,564	1,110,833	575,291	348,668	187,825	385,935	1,263,087
1973	0	14,453	485,534	918,234	493,776	511,904	514,487	883,725	3,139,297
1974	0	17,508	510,873	997,269	560,461	556,968	595,585	1,048,196	3,700,573
1975	0	16,000	430,400	1,201,000	623,100	647,800	683,300	1,375,400	4,905,600
1976	0	18,000	500,400	1,638,000	681,100	793,800	813,300	1,593,400	5,636,600
1977	0	14,000	568,400	1,931,000	743,100	946,800	980,300	1,946,400	6,899,600
1978	0	15,000	684,400	1,566,000	1,112,100	1,111,800	1,267,300	2,461,400	8,864,600
1979	0	13,000	575,400	3,506,000	1,027,100	1,142,800	1,204,300	2,412,400	8,457,600
1980	0	18,000	682,400	2,252,200	1,275,100	1,262,800	1,397,300	2,622,400	9,163,600
1981	14,000	23,200	765,400	3,651,200	1,191,100	1,390,800	1,560,300	2,853,400	9,975,600
1982	16,000	26,200	859,400	2,014,200	1,354,100	1,497,800	1,495,300	3,031,400	10,607,600
1983	85,000	138,200	4,371,400	17,205,200	7,314,100	8,489,800	8,574,300	15,617,400	54,630,600
1984	91,000	233,200	4,500,400	14,059,200	8,134,100	9,766,800	10,213,300	20,311,400	64,818,400
1985	134,000	244,200	4,528,400	18,101,400	9,193,100	10,800,800	10,345,300	20,583,400	65,635,400
1986	128,000	225,200	4,196,400	22,235,400	9,132,100	11,109,800	10,149,300	19,851,400	70,929,400
1987	129,000	216,200	4,025,400	27,966,400	9,341,100	10,887,800	10,687,300	21,591,400	69,914,400
1988	186,000	222,200	4,095,400	27,600,400	10,568,100	11,913,800	10,918,300	22,064,400	78,268,400
1989	206,000	229,200	4,200,400	23,229,400	12,148,100	13,273,800	12,570,300	24,949,400	89,258,400
1990	281,000	234,200	4,250,400	26,054,400	13,242,100	14,322,800	13,751,300	27,580,400	90,483,400
1991	284,000	239,200	4,337,400	26,594,400	13,778,100	14,602,800	14,032,300	28,151,400	92,398,400
1992	274,000	233,200	4,215,400	29,353,400	13,590,100	15,134,800	14,992,300	29,629,400	98,577,400
1993	281,000	239,200	4,314,400	28,339,400	14,214,100	15,351,800	15,185,300	29,982,400	99,625,400
1994	277,000	238,200	4,278,400	28,214,400	14,284,100	15,318,800	15,192,300	30,360,400	107,729,400
1995	276,000	238,200	4,262,400	31,980,400	14,487,100	16,331,800	16,423,300	32,804,400	109,386,400
1996	274,000	238,200	4,197,400	27,806,400	14,774,100	16,872,800	16,061,300	34,067,400	114,457,400
1997	271,000	238,200	4,188,400	32,720,400	14,689,100	16,107,800	16,220,300	32,420,400	108,227,400
1998	266,000	312,200	4,074,400	33,136,400	14,383,100	16,520,800	16,988,300	33,477,400	112,677,400
1999	279,000	329,200	4,393,400	29,605,400	15,166,100	17,260,800	17,742,300	34,941,400	117,529,400
2000	282,000	333,200	4,427,400	31,294,400	15,871,100	18,398,800	18,039,300	35,550,400	119,670,400
2001	271,000	321,200	4,131,400	34,654,400	15,172,100	16,869,800	17,370,300	34,263,400	115,445,400
2002	282,000	335,200	4,276,400	32,275,400	15,674,100	17,416,800	17,924,300	35,332,400	118,971,400
2003	277,000	330,200	4,325,400	34,207,400	15,509,100	17,995,800	17,655,300	35,126,400	125,024,400
2004	277,000	330,200	4,310,400	34,034,400	15,462,100	17,938,800	17,609,300	37,048,400	124,727,400
2005	279,000	333,200	4,484,400	33,203,400	15,596,100	18,126,800	17,811,300	37,471,400	126,215,400
2006	280,000	336,200	4,495,400	34,484,400	15,767,100	18,241,800	18,152,300	37,736,400	127,155,400
2007	273,000	329,200	4,376,400	35,976,400	15,235,100	17,745,800	17,673,300	36,737,400	123,852,400
2008	281,000	340,200	4,494,400	35,662,400	15,945,100	18,231,800	18,140,300	37,713,400	127,065,400
2009	269,000	326,200	4,298,400	35,406,400	15,281,100	17,500,800	18,213,300	36,264,400	129,680,400
2010	362,000	347,200	4,672,400	34,827,400	16,255,100	18,433,800	19,170,300	38,138,400	128,500,400
2011	357,000	343,200	4,438,400	36,705,400	16,128,100	18,951,800	18,791,300	37,353,400	133,698,400
2012	344,000	332,200	4,284,400	37,521,400	15,528,100	18,300,800	18,188,300	38,124,400	129,491,400
2013	356,000	344,200	4,394,400	38,673,400	16,134,100	18,820,800	18,682,300	39,174,400	132,980,400
2014	359,000	348,200	4,421,400	37,797,400	16,231,100	18,963,800	19,045,300	39,480,400	134,035,400
2015	360,000	433,200	4,445,400	36,899,400	16,206,100	19,155,800	19,057,300	39,952,400	135,768,400
2016	365,000	441,200	4,476,400	35,790,400	16,463,100	19,239,800	19,105,300	40,064,400	136,028,400
2017	367,000	444,200	4,478,400	35,819,400	16,684,100	19,269,800	19,352,300	40,121,400	136,204,400
2018	368,000	446,200	4,472,400	35,748,400	16,463,100	19,242,800	20,384,300	40,067,400	136,027,400
2019	366,000	446,200	4,430,400	38,038,400	16,562,100	19,733,800	19,940,300	39,118,400	132,588,400
2020(d)	376,000	464,200	4,461,400	37,096,400	16,785,100	20,080,800	20,324,300	39,917,400	135,434,400

a) Includes the costs of electric capacity and energy used by pumping plants, exclusive of associated power transmission and station service charges; the value of electric capacity and energy produced by power recovery plants (treated as negative costs); the payments to sinking fund reserves that will finance periodic replacement of electro-mechanical equipment; and the plant capacity and energy costs associated with surplus water service prior to May 1, 1973.

b) Power costs for the period 1968 through 1980 are for an interim facility.

# DEPOSITS FOR EACH AQUEDUCT PUMPING AND POWER RECOVERY PLANT<sup>(a)</sup>

dollars)

AQUEDUCT								GRAND TOTAL	Calendar Year
Reach 18A  Cottonwood Powerplant	Reach 22B  Pear- blossom Pumping Plant	Reach 26A  Devil Canyon Powerplant	Reach 29A  Oso Pumping Plant	Reach 29G  Pyramid Powerplant	Reach 29J  Castaic Powerplant	Reach 31A  Las Perillas and Badger Hill Pumping Plants	Reach 33A  Devil's Den Sawtooth and Polonio PP's and San Luis Obispo Pwp.		
(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	
0	0	0	0	0	0	0	0	38,130	1962
0	0	0	0	0	0	0	0	58,871	1963
0	0	0	0	0	0	0	0	75,239	1964
0	0	0	0	0	0	0	0	146,297	1965
0	0	0	0	0	0	0	0	198,643	1966
0	0	0	0	0	0	6,517	0	263,128	1967
0	0	0	0	0	0	120,278	0	2,034,449	1968
0	0	0	0	0	0	79,620	0	1,366,635	1969
0	0	0	0	0	0	137,449	0	1,188,766	1970
0	64,807	0	1,696	0	0	171,389	0	1,725,032	1971
0	103,584	-3,112	180,005	0	-385,696	240,651	0	4,645,065	1972
0	615,309	-931,697	274,450	0	-1,193,216	128,730	0	5,854,986	1973
0	595,646	-939,072	322,440	0	-1,823,397	129,345	0	6,272,395	1974
0	628,100	-1,235,500	480,800	0	-2,774,964	100,665	0	7,081,701	1975
0	910,900	-1,501,100	394,800	0	-3,117,000	149,700	0	8,511,900	1976
0	2,047,900	-3,276,100	214,800	0	-2,311,000	165,700	0	10,870,900	1977
0	2,532,900	-4,174,100	246,800	0	-2,691,000	218,700	0	13,215,900	1978
0	2,412,900	-4,780,100	231,800	0	-2,999,000	174,700	0	13,378,900	1979
0	2,757,900	-4,462,100	245,800	-171,000	-3,205,000	222,500	0	14,061,900	1980
-198,400	3,188,900	-4,299,100	247,800	-1,033,900	-2,971,000	256,500	-2,000	16,613,800	1981
-381,400	3,462,900	-4,293,100	278,800	-1,162,900	-2,905,000	297,500	132,800	16,331,600	1982
-1,838,400	17,572,900	-20,738,100	1,514,800	-8,295,900	-8,323,000	1,309,500	827,800	98,455,600	1983
-2,022,400	19,461,900	-22,226,100	1,723,800	-11,518,900	-11,200,000	1,419,500	1,354,800	109,120,400	1984
-1,432,400	18,005,900	-18,778,100	1,950,800	-12,558,900	-11,661,000	1,555,500	1,533,800	118,181,600	1985
-1,411,400	16,830,900	-18,704,100	2,043,800	-13,071,900	-11,990,000	1,455,500	1,668,800	124,778,600	1986
-1,162,400	17,077,900	-19,976,100	2,624,800	-14,476,900	-14,258,000	1,442,500	2,045,800	128,076,600	1987
-1,873,400	17,582,900	-19,747,100	2,638,800	-14,417,900	-13,660,000	1,581,500	2,596,800	140,538,600	1988
-1,710,400	17,514,900	-19,215,100	4,109,800	-18,180,900	-16,840,000	1,694,500	2,818,800	150,256,600	1989
-1,673,400	18,009,900	-19,655,100	4,497,800	-19,341,900	-17,932,000	1,997,500	3,515,800	159,618,600	1990
-1,873,400	17,909,900	-19,791,100	5,294,800	-20,736,900	-19,359,000	2,031,500	3,592,800	161,486,600	1991
-1,764,400	17,354,900	-18,941,100	6,308,800	-22,891,900	-21,771,000	1,961,500	3,497,800	169,754,600	1992
-1,730,400	17,476,900	-19,822,100	6,429,800	-22,336,900	-20,599,000	2,003,500	3,529,800	172,484,600	1993
-2,059,400	17,316,900	-19,983,100	6,511,800	-23,825,900	-22,071,000	1,971,500	3,475,800	177,229,600	1994
-1,791,400	17,335,900	-20,248,100	7,140,800	-25,035,900	-24,043,000	1,966,500	3,994,800	185,509,600	1995
-1,876,400	16,947,900	-18,622,100	7,476,800	-23,655,900	-23,049,000	1,953,500	4,007,800	191,931,600	1996
-1,858,400	16,843,900	-20,274,100	7,648,800	-25,003,900	-23,800,000	2,016,500	3,946,800	184,602,600	1997
-2,044,400	16,403,900	-20,362,100	8,435,800	-25,231,900	-26,318,000	1,976,500	3,815,800	188,511,600	1998
-1,931,400	17,090,900	-20,339,100	8,298,800	-25,264,900	-25,094,000	2,072,500	4,024,800	196,104,600	1999
-2,096,400	17,239,900	-20,343,100	9,033,800	-25,194,900	-26,274,000	2,089,500	4,081,800	202,403,600	2000
-2,075,400	16,585,900	-20,808,100	8,688,800	-25,699,900	-26,782,000	2,003,500	3,894,800	194,306,600	2001
-2,058,400	16,987,900	-20,358,100	9,017,800	-24,775,900	-26,208,000	2,080,500	4,094,800	201,268,600	2002
-1,910,400	16,753,900	-19,459,100	9,325,800	-24,495,900	-28,461,000	2,044,500	4,057,800	208,306,600	2003
-2,257,400	16,665,900	-21,092,100	9,319,800	-26,051,900	-28,537,000	2,035,500	3,969,800	205,790,600	2004
-2,024,400	16,782,900	-19,986,100	9,540,800	-25,127,900	-29,103,000	2,051,500	4,064,800	209,719,600	2005
-2,270,400	16,867,900	-21,299,100	9,546,800	-26,300,900	-28,994,000	2,055,500	4,040,800	210,295,600	2006
-2,033,400	16,348,900	-21,238,100	9,319,800	-26,298,900	-30,262,000	1,994,500	3,907,800	203,937,600	2007
-1,909,400	16,826,900	-21,108,100	10,070,800	-26,255,900	-29,893,000	2,053,500	4,011,800	211,670,600	2008
-2,235,400	16,023,900	-21,055,100	9,736,800	-26,220,900	-29,461,000	1,956,500	3,842,800	209,827,600	2009
-2,385,400	16,953,900	-21,228,100	10,742,800	-26,400,900	-29,906,000	2,071,500	4,067,800	214,622,600	2010
-1,714,400	16,570,900	-20,140,100	10,572,800	-26,116,900	-30,729,000	2,040,500	3,940,800	221,191,600	2011
-2,030,400	16,000,900	-20,243,100	10,229,800	-26,585,900	-30,924,000	1,956,500	3,800,800	214,319,600	2012
-2,258,400	16,416,900	-20,316,100	11,048,800	-26,237,900	-31,235,000	2,016,500	3,895,800	222,890,600	2013
-2,353,400	16,519,900	-20,518,100	10,627,800	-26,376,900	-31,852,000	2,028,500	3,934,800	222,692,600	2014
-2,304,400	16,609,900	-20,664,100	10,796,800	-26,510,900	-30,869,000	2,031,500	3,944,800	225,312,600	2015
-2,173,400	16,720,900	-20,682,100	10,806,800	-26,556,900	-31,821,000	2,054,500	3,971,800	224,294,600	2016
-1,738,400	16,736,900	-20,065,100	11,357,800	-26,117,900	-32,134,000	2,058,500	3,988,800	226,827,600	2017
-2,339,400	16,692,900	-20,633,100	10,822,800	-27,097,900	-32,046,000	2,054,500	3,973,800	224,647,600	2018
-2,332,400	16,481,900	-20,419,100	9,953,800	-26,273,900	-30,608,000	2,044,500	3,917,800	223,988,600	2019
-2,162,400	16,685,900	-19,146,100	10,767,800	-26,727,900	-32,535,000	2,057,500	3,970,800	227,850,600	2020

c) The estimated costs of Del Valle Pumping Plant are combined with those of South Bay Pumping Plant to simplify the cost allocations.

d) And each year thereafter for the remainder of the project repayment period.

TABLE B-4: ANNUAL ENTITLE-

(in acre-feet)<sup>(b)</sup>

Sheet 1 of 4

Calendar Year	NORTH BAY AREA			SOUTH BAY AREA (c)				CENTRAL COASTAL AREA		
	Napa County FC & WCD(d)	Solano County FC & WCD	Total	Alameda County FC & WCD Zone 7	Alameda County Water District	Santa Clara Valley Water District	Total	San Luis Obispo County FC & WCD	Santa Barbara County FC & WCD	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1962	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	507	5,248	5,783	11,538	0	0	0
1968	0	0	0	6,900	15,000	88,000	109,900	0	0	0
1969	0	0	0	8,200	15,500	75,000	98,700	0	0	0
1970	0	0	0	10,000	16,200	88,000	114,200	0	0	0
1971	0	0	0	11,200	17,000	88,000	116,200	0	0	0
1972	0	0	0	12,400	17,900	88,000	118,300	0	0	0
1973	0	0	0	13,600	18,800	88,000	120,400	0	0	0
1974	0	0	0	14,800	19,600	88,000	122,400	0	0	0
1975	0	0	0	16,000	20,500	88,000	124,500	0	0	0
1976	0	0	0	17,200	21,300	88,000	126,500	0	0	0
1977	0	0	0	18,400	22,200	88,000	128,600	0	0	0
1978	0	0	0	19,600	23,100	88,000	130,700	0	0	0
1979	0	0	0	20,800	23,900	88,000	132,700	0	0	0
1980	12,500	6,750	19,250	22,000	24,800	88,000	134,800	1,000	1,200	2,200
1981	13,750	8,000	21,750	23,000	26,000	88,000	137,000	1,000	2,300	3,300
1982	15,000	9,400	24,400	24,000	27,200	88,000	139,200	2,000	4,600	6,600
1983	16,250	10,800	27,050	25,000	28,400	88,000	141,400	3,000	6,900	9,900
1984	17,500	12,100	29,600	26,000	29,600	88,000	143,600	4,500	10,400	14,900
1985	18,750	14,000	32,750	27,000	30,800	88,000	145,800	7,500	17,300	24,800
1986	20,000	16,500	36,500	28,000	32,100	88,000	148,100	10,000	23,100	33,100
1987	21,250	20,000	41,250	29,000	33,300	88,000	150,300	12,500	28,800	41,300
1988	22,500	27,000	49,500	30,000	34,500	88,000	152,500	15,500	35,800	51,300
1989	23,750	34,500	58,250	31,000	35,700	90,000	156,700	20,000	46,100	66,100
1990	25,000	42,000	67,000	32,000	36,900	92,000	160,900	25,000	57,700	82,700
1991	25,000	42,000	67,000	34,000	38,400	94,000	166,400	25,000	57,700	82,700
1992	25,000	42,000	67,000	36,000	39,900	96,000	171,900	25,000	57,700	82,700
1993	25,000	42,000	67,000	38,000	41,400	98,000	177,400	25,000	57,700	82,700
1994	25,000	42,000	67,000	40,000	42,000	100,000	182,000	25,000	57,700	82,700
1995	25,000	42,000	67,000	42,000	42,000	100,000	184,000	25,000	57,700	82,700
1996	25,000	42,000	67,000	44,000	42,000	100,000	186,000	25,000	57,700	82,700
1997	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
1998	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
1999	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2000	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2001	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2002	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2003	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2004	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2005	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2006	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2007	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2008	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2009	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2010	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2011	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2012	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2013	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2014	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2015	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2016	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2017	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2018	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2019	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2020	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2021	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2022	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2023	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2024	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2025	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2026	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2027	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2028	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2029	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2030	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2031	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2032	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2033	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2034	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2035	25,000	42,000	67,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
TOTAL	1,331,250	2,091,050	3,422,300	2,494,607	2,459,248	6,510,783	11,464,638	1,227,000	2,830,700	4,057,700

a) From Tables A and Articles 6(a) of water supply contracts as of December 31, 1972.

b) Metric conversion is acre-feet times 1.2335 equals cubic dekametres.

c) Entitlements for the South Bay Area were supplied by nonproject water for the period June 1962 through November 1967. Actual delivery quantities of project water are shown for 1967.

d) District's Table A quantities exclude those during the period 1968 through 1979 which are assumed to be supplied by nonproject water.

(in acre-feet)<sup>(b)</sup>

Sheet 2 of 4

Calendar Year	SAN JOAQUIN VALLEY AREA								
	Devil's Den Water District	Dudley Ridge Water District	Empire West Side Irrigation District	Hacienda Water District	Kern County Water Agency	County of Kings	Oak Flat Water District	Tulare Lake Basin Water Storage District	Total
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1962	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0
1968	3,700	14,300	1,000	0	46,600	900	2,300	12,250	81,050
1969	5,000	14,325	3,000	2,400	95,700	1,200	2,500	43,950	168,075
1970	5,700	15,700	3,000	2,500	145,100	1,300	2,600	31,800	207,700
1971	6,700	17,900	3,000	2,300	190,300	1,300	2,800	34,200	258,500
1972	7,700	20,000	3,000	2,600	270,700	1,400	5,366	110,000	420,766
1973	8,700	22,000	3,000	2,900	310,500	1,500	3,100	40,652	392,352
1974	9,700	33,390	3,000	3,300	347,000	1,500	3,471	68,989	470,350
1975	10,700	40,555	3,000	3,758	410,820	1,600	3,576	82,500	556,509
1976	11,700	28,300	3,000	3,900	432,800	1,600	3,500	50,800	535,600
1977	12,700	30,400	3,000	4,200	483,600	1,700	3,700	54,800	594,100
1978	12,700	32,500	3,000	4,600	534,300	1,900	3,900	58,700	651,600
1979	12,700	34,600	3,000	4,900	583,900	2,000	4,000	62,600	707,700
1980	12,700	36,700	3,000	5,200	634,500	2,200	4,200	66,500	765,000
1981	12,700	38,800	3,000	5,600	691,400	2,300	4,300	70,400	828,500
1982	12,700	41,000	3,000	5,900	745,300	2,500	4,500	74,300	889,200
1983	12,700	42,900	3,000	6,200	805,100	2,800	4,600	78,200	955,500
1984	12,700	45,100	3,000	6,500	860,600	3,100	4,800	82,100	1,017,900
1985	12,700	47,200	3,000	6,900	915,000	3,400	4,900	86,000	1,079,100
1986	12,700	49,300	3,000	7,200	968,200	3,700	5,100	90,000	1,139,200
1987	12,700	51,400	3,000	7,500	1,023,500	4,000	5,200	93,900	1,201,200
1988	12,700	53,500	3,000	7,800	1,074,600	4,000	5,400	97,800	1,258,800
1989	12,700	55,600	3,000	8,200	1,112,300	4,000	5,600	101,700	1,303,100
1990	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
1991	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
1992	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
1993	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
1994	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
1995	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
1996	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
1997	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
1998	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
1999	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2000	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2001	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2002	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2003	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2004	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2005	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2006	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2007	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2008	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2009	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2010	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2011	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2012	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2013	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2014	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2015	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2016	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2017	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2018	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2019	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2020	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2021	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2022	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2023	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2024	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2025	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2026	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2027	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2028	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2029	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2030	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2031	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2032	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2033	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2034	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2035	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
TOTAL	818,900	3,419,670	202,000	495,358	65,738,220	233,900	351,613	6,552,141	77,811,802

TABLE B-4: ANNUAL ENTITLE-

(in acre-feet)<sup>(b)</sup>

Sheet 3 of 4

Calendar Year	SOUTHERN CALIFORNIA AREA									
	Antelope Valley-East Kern Water Agency	Castaic Lake Water Agency	Coachella Valley County Water District	Crestline Lake Arrowhead Water Agency	Desert Water Agency	Littlerock Creek Irrigation District	Mojave Water Agency	Palmdale Water District	San Bernardino Valley Municipal Water District	San Gabriel Valley Municipal Water District
	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
1962	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0
1972	20,000	1,236	5,200	526	8,000	170	8,400	1,620	1,677	122
1973	25,000	3,700	5,800	870	9,000	290	10,700	2,940	48,000	11,500
1974	30,000	5,700	6,400	1,160	10,000	400	13,100	4,260	50,000	12,300
1975	35,000	7,500	7,000	1,450	11,000	520	15,400	5,580	52,500	13,100
1976	44,000	9,500	7,600	1,740	12,000	640	17,800	6,900	55,000	14,000
1977	50,000	11,400	8,421	2,030	13,000	730	20,200	8,220	57,500	14,800
1978	57,000	13,400	9,242	2,320	14,000	920	22,500	9,340	60,000	15,700
1979	63,000	15,300	10,063	2,610	15,000	1,040	24,900	10,260	62,500	16,600
1980	69,200	17,700	10,884	2,900	17,000	1,150	27,200	11,180	65,500	17,400
1981	75,000	20,100	12,105	3,190	19,000	1,270	29,600	11,700	68,500	18,300
1982	81,300	22,100	13,326	3,480	21,000	1,380	31,900	12,320	71,500	19,100
1983	87,700	24,600	14,547	3,770	23,000	1,500	34,300	12,940	74,500	19,900
1984	94,000	26,900	15,768	4,060	25,000	1,610	36,700	13,560	78,000	20,700
1985	100,400	29,100	16,989	4,350	27,000	1,730	39,000	14,180	81,500	21,600
1986	106,700	30,900	18,210	4,640	29,000	1,840	41,400	14,800	85,000	23,200
1987	113,000	32,900	19,431	4,930	31,500	1,960	43,700	15,420	89,000	24,600
1988	119,400	35,300	20,652	5,220	34,000	2,070	46,000	16,040	93,000	26,000
1989	125,700	37,400	21,873	5,510	36,500	2,190	48,500	16,660	97,000	27,400
1990	132,100	39,300	23,100	5,800	38,100	2,300	50,800	17,300	101,500	28,800
1991	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
1992	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
1993	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
1994	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
1995	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
1996	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
1997	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
1998	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
1999	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2000	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2001	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2002	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2003	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2004	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2005	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2006	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2007	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2008	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2009	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2010	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2011	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2012	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2013	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2014	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2015	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2016	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2017	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2018	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2019	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2020	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2021	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2022	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2023	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2024	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2025	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2026	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2027	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2028	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2029	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2030	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2031	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2032	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2033	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2034	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
2035	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,800
TOTAL	7,656,500	2,251,536	1,286,111	321,556	2,107,600	127,210	2,848,100	983,720	5,909,177	1,641,322



# MENTS TO PROJECT WATER (a)

(in acre-feet)<sup>(b)</sup>

Sheet 4 of 4

Calendar Year	SOUTHERN CALIFORNIA AREA (continued)				FEATHER RIVER AREA				TOTAL STATE WATER PROJECT
	San Geronio Pass Water Agency	The Metropolitan Water District of Southern California	Ventura County Flood Control District	Total	City of Yuba City	County of Butte	Plumas County FC & WCD	Total	
	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)
1962	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	11,538
1968	0	0	0	0	0	300	250	550	191,500
1969	0	0	0	0	0	350	270	620	267,395
1970	0	0	0	0	0	400	300	700	322,600
1971	0	0	0	0	0	450	440	890	375,590
1972	0	154,772	0	201,723	0	500	470	970	741,759
1973	0	354,600	0	472,400	0	600	500	1,100	986,252
1974	0	454,900	0	588,220	0	700	530	1,230	1,182,200
1975	0	555,200	0	704,250	0	1,050	560	1,610	1,386,869
1976	0	655,600	0	824,780	0	1,400	590	1,990	1,488,870
1977	0	755,900	0	942,201	0	1,800	620	2,420	1,667,321
1978	0	856,300	0	1,060,722	0	2,200	650	2,850	1,845,872
1979	0	956,600	0	1,177,873	0	2,600	680	3,280	2,021,553
1980	6,800	1,057,000	1,000	1,304,914	0	4,000	710	4,710	2,230,874
1981	7,800	1,157,300	2,000	1,425,865	4,200	5,450	740	10,390	2,426,805
1982	8,800	1,257,600	3,000	1,546,806	4,600	6,900	770	12,270	2,618,476
1983	9,800	1,358,000	4,000	1,668,557	5,050	8,350	800	14,200	2,816,607
1984	10,800	1,458,300	5,000	1,790,398	5,500	9,800	830	16,130	3,012,528
1985	11,800	1,558,700	6,000	1,912,549	5,950	12,250	860	19,060	3,214,059
1986	12,900	1,659,300	8,000	2,035,890	6,600	14,700	890	22,190	3,414,980
1987	14,000	1,759,800	10,000	2,160,241	7,300	17,150	920	25,370	3,619,661
1988	15,100	1,860,400	13,000	2,286,182	8,000	20,600	960	29,560	3,827,842
1989	16,200	1,961,000	16,000	2,411,933	8,800	24,050	1,000	33,850	4,029,933
1990	17,300	2,011,500	20,000	2,487,900	9,600	27,500	1,040	38,140	4,191,640
1991	17,300	2,011,500	20,000	2,497,500	9,600	27,500	1,080	38,180	4,206,780
1992	17,300	2,011,500	20,000	2,497,500	9,600	27,500	1,120	38,220	4,212,320
1993	17,300	2,011,500	20,000	2,497,500	9,600	27,500	1,160	38,260	4,217,860
1994	17,300	2,011,500	20,000	2,497,500	9,600	27,500	1,200	38,300	4,222,500
1995	17,300	2,011,500	20,000	2,497,500	9,600	27,500	1,250	38,350	4,224,550
1996	17,300	2,011,500	20,000	2,497,500	9,600	27,500	1,300	38,400	4,226,600
1997	17,300	2,011,500	20,000	2,497,500	9,600	27,500	1,350	38,450	4,228,650
1998	17,300	2,011,500	20,000	2,497,500	9,600	27,500	1,400	38,500	4,228,700
1999	17,300	2,011,500	20,000	2,497,500	9,600	27,500	1,450	38,550	4,228,750
2000	17,300	2,011,500	20,000	2,497,500	9,600	27,500	1,510	38,610	4,228,810
2001	17,300	2,011,500	20,000	2,497,500	9,600	27,500	1,570	38,670	4,228,870
2002	17,300	2,011,500	20,000	2,497,500	9,600	27,500	1,630	38,730	4,228,930
2003	17,300	2,011,500	20,000	2,497,500	9,600	27,500	1,690	38,790	4,228,990
2004	17,300	2,011,500	20,000	2,497,500	9,600	27,500	1,750	38,850	4,229,050
2005	17,300	2,011,500	20,000	2,497,500	9,600	27,500	1,810	38,910	4,229,110
2006	17,300	2,011,500	20,000	2,497,500	9,600	27,500	1,880	38,980	4,229,180
2007	17,300	2,011,500	20,000	2,497,500	9,600	27,500	1,950	39,050	4,229,250
2008	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,020	39,120	4,229,320
2009	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,090	39,190	4,229,390
2010	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,160	39,260	4,229,460
2011	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,240	39,340	4,229,540
2012	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,320	39,420	4,229,620
2013	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,410	39,510	4,229,710
2014	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,500	39,600	4,229,800
2015	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,600	39,700	4,229,900
2016	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,700	39,800	4,230,000
2017	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,700	39,800	4,230,000
2018	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,700	39,800	4,230,000
2019	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,700	39,800	4,230,000
2020	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,700	39,800	4,230,000
2021	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,700	39,800	4,230,000
2022	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,700	39,800	4,230,000
2023	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,700	39,800	4,230,000
2024	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,700	39,800	4,230,000
2025	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,700	39,800	4,230,000
2026	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,700	39,800	4,230,000
2027	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,700	39,800	4,230,000
2028	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,700	39,800	4,230,000
2029	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,700	39,800	4,230,000
2030	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,700	39,800	4,230,000
2031	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,700	39,800	4,230,000
2032	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,700	39,800	4,230,000
2033	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,700	39,800	4,230,000
2034	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,700	39,800	4,230,000
2035	17,300	2,011,500	20,000	2,497,500	9,600	27,500	2,700	39,800	4,230,000
TOTAL	909,800	112,360,272	988,000	139,390,904	497,600	1,400,600	112,820	2,011,020	238,158,364

TABLE B-5A: ANNUAL WATER QUANTITIES DELIVERED

(in acre-feet)<sup>(b)</sup>

Sheet 1 of 6

Calendar Year	Grizzly Valley Pipeline PC FC&WCD	NORTH BAY AQUEDUCT (c)			SOUTH BAY AQUEDUCT						
		Reach 2  SC FC&WCD	Reach 3  NC FC&WCD	TOTAL	Reach 1		Reach 2  AC FC&WCD	Reach 4  AC FC&WCD	Reach 5		Reach 6  AC FC&WCD
					ACWD	AC FC&WCD			ACWD	AC FC&WCD	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
1962	0	0	0	0	8,412	141	353	0	0	0	0
1963	0	0	0	0	10,914	814	917	0	0	0	0
1964	0	0	0	0	19,238	248	1,425	0	0	0	0
1965	0	0	0	0	15,280	637	1,830	138	0	0	0
1966	0	0	0	0	0	2,475	2,537	499	0	0	0
1967	0	0	0	0	0	1,527	2,391	862	0	0	0
1968	0	0	1,214	1,214	0	1,608	3,799	721	0	5	0
1969	0	0	2,687	2,687	0	1,165	3,459	1,851	0	160	0
1970	70	0	3,618	3,618	0	1,345	4,558	3,182	0	164	0
1971	64	0	2,521	2,521	0	546	1,908	2,403	0	160	0
1972	505	0	3,647	3,647	0	1,066	4,605	2,041	1,489	2,777	0
1973	679	0	3,792	3,792	0	430	1,123	1,193	0	229	0
1974	648	0	4,870	4,870	0	177	0	975	0	162	0
1975	405	0	6,840	6,840	0	137	1,783	1,864	0	120	714
1976	590	0	5,395	5,395	0	221	5,788	3,095	0	2,265	5,831
1977	620	0	5,455	5,455	0	221	6,054	3,364	0	2,628	6,133
1978	650	0	5,495	5,495	0	221	6,351	3,390	0	3,169	6,469
1979	680	0	5,550	5,550	0	221	6,705	3,390	0	3,625	6,859
1980	710	0	5,605	5,605	0	221	6,995	3,390	0	4,247	7,147
1981	740	8,000	5,655	13,655	0	221	6,075	3,390	0	4,250	9,064
1982	770	9,400	5,700	15,100	0	221	5,254	3,390	0	4,461	10,674
1983	800	10,330	6,800	17,130	0	600	6,100	3,200	0	2,400	12,760
1984	830	11,160	7,900	19,060	0	600	6,400	3,400	0	2,400	13,200
1985	860	12,670	9,100	21,970	0	600	6,700	3,500	0	2,500	13,700
1986	890	15,240	9,400	24,640	0	600	7,000	3,700	0	2,400	14,300
1987	920	18,320	9,700	28,020	0	600	7,300	3,800	0	2,400	14,900
1988	960	24,900	10,000	34,900	0	600	4,500	4,000	0	2,300	18,600
1989	1,000	31,350	10,300	41,650	0	600	4,700	4,100	0	2,200	19,400
1990	1,040	37,800 (d)	10,700	48,500	0	1,000	4,900	3,800	0	1,900	20,400
1991	1,080	37,800	11,000	48,800	0	1,000	5,000	3,900	0	1,900	21,000
1992	1,120	37,800	11,400	49,200	0	1,000	5,200	3,900	0	1,700	21,800
1993	1,160	37,800	11,700	49,500	0	1,000	5,300	4,200	0	1,700	22,200
1994	1,200	37,800	12,100	49,900	0	1,000	5,400	4,400	0	1,800	22,600
1995	1,250	37,800	12,400	50,200	0	1,000	9,400	4,400	0	1,600	19,600
1996	1,300	37,800	12,800	50,600	0	1,000	9,600	4,600	0	1,500	20,100
1997	1,350	37,800	13,200	51,000	0	1,000	9,900	4,700	0	1,400	20,600
1998	1,400	37,800	13,600	51,400	0	1,000	10,100	4,800	0	1,400	21,100
1999	1,450	37,800	14,000	51,800	0	1,000	10,400	4,900	0	1,300	21,600
2000	1,510	37,800	14,400	52,200	0	1,000	10,600	5,100	0	1,200	22,100
2001	1,570	37,800	14,700	52,500	0	1,000	10,800	5,200	0	1,300	22,500
2002	1,630	37,800	15,000	52,800	0	1,000	11,100	5,200	0	1,300	23,000
2003	1,690	37,800	15,300	53,100	0	1,000	11,400	5,200	0	1,400	23,400
2004	1,750	37,800	15,600	53,400	0	1,000	11,600	5,300	0	1,400	23,900
2005	1,810	37,800	15,900	53,700	0	1,000	11,800	5,300	0	1,500	24,400
2006	1,880	37,800	16,300	54,100	0	1,000	12,100	5,000	0	1,400	24,900
2007	1,950	37,800	16,700	54,500	0	1,000	12,300	4,800	0	1,400	25,300
2008	2,020	37,800	17,000	54,800	0	1,000	12,600	4,500	0	1,300	25,800
2009	2,090	37,800	17,400	55,200	0	1,000	12,800	4,300	0	1,300	26,200
2010	2,160	37,800	17,800	55,600	0	1,000	13,000	4,100	0	1,200	26,700
2011	2,240	37,800	18,200	56,000	0	1,000	13,200	3,800	0	900	27,100
2012	2,320	37,800	18,600	56,400	0	1,000	13,400	3,400	0	600	27,600
2013	2,410	37,800	19,000	56,800	0	1,000	13,600	3,400	0	0	28,000
2014	2,500	37,800	19,500	57,300	0	900	13,800	3,000	0	0	28,300
2015	2,600	37,800	20,000	57,800	0	800	14,000	2,400	0	0	28,800
2016	2,700	37,800	20,500	58,300	0	700	14,200	1,800	0	0	29,300
2017	2,700	37,800	21,000	58,800	0	600	14,400	1,800	0	0	29,200
2018	2,700	37,800	21,500	59,300	0	600	14,600	1,000	0	0	29,800
2019	2,700	37,800	22,000	59,800	0	0	14,800	800	0	0	30,400
2020(f)	2,700	37,800	25,000	62,800	0	0	15,000	0	0	0	31,000

a) Includes surplus water delivered prior to May 1, 1973, and nonproject water.

b) Metric conversion is acre-feet times 1.2335 equals cubic dekameters.

c) For the period 1968 through 1980 annual quantities delivered are nonproject water pumped through an interim facility.

d) Solano County Flood Control and Water Conservation District (SCFC&amp;WCD) has contracted for 42,000 acre-feet maximum annually, of which 4,200 acre-feet will be delivered from the Delta through the District's facilities.

e) For the period June 1962 through November 1967, deliveries were supplied by nonproject water.

f) And thereafter for the remainder of the project repayment period.

FROM EACH AQUEDUCT REACH TO EACH CONTRACTOR<sup>(a)</sup>(in acre-feet)<sup>(b)</sup>

Sheet 2 of 6

Calendar  Year	SOUTH BAY AQUEDUCT (e) (continued)				NORTH SAN JOAQUIN DIVISION Reach 2A	CALIFORNIA AQUEDUCT						
	Reach 7	Reach 8	Reach 9			SOUTH SAN JOAQUIN DIVISION						
						Reach 8C				Reach 8D		
						ACWD	ACWD	SCVWD	TOTAL	OFWD	HWD	TLBWS
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	
1962	0	0	0	8,906	0	0	0	0	0	0	0	0
1963	0	0	0	12,645	0	0	0	0	0	0	0	0
1964	0	0	0	20,911	0	0	0	0	0	0	0	0
1965	1,127	0	15,014	34,026	0	0	0	0	0	0	0	0
1966	14,864	0	34,538	54,913	0	0	0	0	0	0	0	0
1967	12,882	0	39,101	56,763	0	0	0	0	0	0	0	0
1968	24,817	0	70,105	101,055	3,084	0	25,100	1,978	900	0	26,360	0
1969	813	0	62,264	69,712	3,016	0	7,081	56	100	0	31,375	0
1970	0	0	80,311	89,560	5,911	0	0	3,942	0	0	40,407	3,408
1971	5,961	0	87,606	98,584	7,212	0	80,906	5,990	3,700	0	41,053	6,659
1972	26,182	0	100,266	138,426	8,166	0	144,843	5,795	1,400	0	42,443	5,851
1973	2,521	0	88,582	94,078	3,214	140	26,177	3,000	1,500	1,500	22,057	2,760
1974	0	4	88,000	89,318	3,471	0	32,603	3,000	1,500	0	33,390	3,300
1975	393	593	88,000	93,604	3,576	0	41,536	3,000	1,600	0	40,555	3,758
1976	12,526	8,774	88,000	126,500	3,500	0	25,500	3,000	1,600	0	28,300	3,900
1977	13,426	8,774	88,000	128,600	3,700	0	27,500	3,000	1,700	0	30,400	4,200
1978	14,326	8,774	88,000	130,700	3,900	0	29,500	3,000	1,900	0	32,500	4,600
1979	15,126	8,774	88,000	132,700	4,000	0	31,400	3,000	2,000	0	34,600	4,900
1980	16,026	8,774	88,000	134,800	4,200	0	33,400	3,000	2,200	0	36,700	5,200
1981	17,226	8,774	88,000	137,000	4,300	0	35,300	3,000	2,300	0	38,800	5,600
1982	18,426	8,774	88,000	139,200	4,500	0	37,300	3,000	2,500	0	41,000	5,900
1983	19,626	8,774	88,000	141,400	4,600	0	39,200	3,000	2,800	0	42,900	6,200
1984	20,826	8,774	88,000	143,600	4,800	0	41,100	3,000	3,100	0	45,100	6,500
1985	22,026	8,774	88,000	145,800	4,900	0	43,100	3,000	3,400	0	47,200	6,900
1986	23,326	8,774	88,000	148,100	5,100	0	45,100	3,000	3,700	0	49,300	7,200
1987	24,526	8,774	88,000	150,300	5,200	0	47,000	3,000	4,000	0	51,400	7,500
1988	25,726	8,774	88,000	152,500	5,400	0	49,000	3,000	4,000	0	53,500	7,800
1989	26,926	8,774	90,000	156,700	5,600	0	50,900	3,000	4,000	0	55,600	8,200
1990	28,126	8,774	92,000	160,900	5,700	0	55,100	3,000	4,000	0	57,700	8,500
1991	29,626	8,774	94,000	165,200	5,700	0	55,100	3,000	4,000	0	57,700	8,500
1992	31,126	8,774	96,000	169,500	5,700	0	55,100	3,000	4,000	0	57,700	8,500
1993	32,626	8,774	98,000	173,800	5,700	0	55,100	3,000	4,000	0	57,700	8,500
1994	33,226	8,774	100,000	177,200	5,700	0	55,100	3,000	4,000	0	57,700	8,500
1995	33,226	8,774	100,000	178,000	5,700	0	55,100	3,000	4,000	0	57,700	8,500
1996	33,226	8,774	100,000	178,800	5,700	0	55,100	3,000	4,000	0	57,700	8,500
1997	33,226	8,774	100,000	179,600	5,700	0	55,100	3,000	4,000	0	57,700	8,500
1998	33,226	8,774	100,000	180,400	5,700	0	55,100	3,000	4,000	0	57,700	8,500
1999	33,226	8,774	100,000	181,200	5,700	0	55,100	3,000	4,000	0	57,700	8,500
2000	33,226	8,774	100,000	182,000	5,700	0	55,100	3,000	4,000	0	57,700	8,500
2001	33,226	8,774	100,000	182,800	5,700	0	55,100	3,000	4,000	0	57,700	8,500
2002	33,226	8,774	100,000	183,600	5,700	0	55,100	3,000	4,000	0	57,700	8,500
2003	33,226	8,774	100,000	184,400	5,700	0	55,100	3,000	4,000	0	57,700	8,500
2004	33,226	8,774	100,000	185,200	5,700	0	55,100	3,000	4,000	0	57,700	8,500
2005	33,226	8,774	100,000	186,000	5,700	0	55,100	3,000	4,000	0	57,700	8,500
2006	33,226	8,774	100,000	186,400	5,700	0	55,100	3,000	4,000	0	57,700	8,500
2007	33,226	8,774	100,000	186,800	5,700	0	55,100	3,000	4,000	0	57,700	8,500
2008	33,226	8,774	100,000	187,200	5,700	0	55,100	3,000	4,000	0	57,700	8,500
2009	33,226	8,774	100,000	187,600	5,700	0	55,100	3,000	4,000	0	57,700	8,500
2010 (f)	33,226	8,774	100,000	188,000	5,700	0	55,100	3,000	4,000	0	57,700	8,500

Calendar Year	CALIFORNIA AQUEDUCT (continued)											
	SOUTH SAN JOAQUIN DIVISION (continued)											
	Reach 8 D (continued)	Reach 9		Reach 10 A			Reach 11 B	Reach 12 D	Reach 12 E		Reach 13 B	
		KCWA (Ag.)	HWD	KCWA (M&I)	KCWA (Ag.)	HWD			KCWA (M&I)	KCWA (Ag.)	KCWA (M&I)	KCWA (Ag.)
	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)
1968	0	30,951	0	0	0	0	24,776	0	0	0	0	0
1969	0	24,489	0	0	0	2,842	64,682	0	0	0	0	0
1970	0	46,114	1,855	0	158	4,315	72,279	0	0	9,279	0	4,891
1971	34,920	58,356	0	0	9,973	0	63,773	0	0	28,056	0	0
1972	107,699	75,464	0	0	5,876	0	72,358	0	0	62,342	0	17,388
1973	21,387	34,593	0	0	22,948	0	67,544	0	0	13,082	0	9,297
1974	36,386	63,814	0	10,019	22,719	0	87,476	0	2,651	4,248	8,038	4,246
1975	40,964	50,021	0	2,791	72,121	0	85,675	0	0	10,787	8,538	7,059
1976	25,300	61,100	0	7,300	41,752	0	92,853	0	6,000	48,146	8,000	6,875
1977	27,300	66,800	0	4,645	78,921	0	95,569	0	25,000	40,985	8,000	10,960
1978	29,200	50,100	0	2,405	89,940	0	103,455	0	25,000	48,092	8,000	15,308
1979	31,200	53,300	0	3,305	100,202	0	110,798	0	25,000	55,300	8,000	16,995
1980	33,100	56,200	0	4,005	111,364	0	117,096	0	25,000	62,965	8,000	18,870
1981	35,100	61,958	0	4,605	122,354	0	124,722	0	25,000	73,429	8,000	15,123
1982	37,000	62,190	0	5,305	137,439	0	129,362	0	25,000	80,781	8,000	22,935
1983	39,000	62,800	0	5,370	171,200	0	134,700	2,400	25,000	99,400	8,000	24,100
1984	41,000	63,500	0	5,430	190,300	0	140,000	2,400	25,000	101,000	8,000	25,200
1985	42,900	64,200	0	5,500	212,900	0	145,400	2,400	25,000	111,800	8,000	21,300
1986	44,900	65,400	0	4,500	233,900	0	150,000	2,400	25,000	119,200	8,000	22,400
1987	46,900	66,700	0	3,400	257,100	0	153,300	2,400	25,000	127,700	8,000	23,500
1988	48,800	67,900	0	2,300	278,000	0	155,800	2,400	25,000	135,100	8,000	24,600
1989	50,800	69,100	0	1,100	298,600	0	158,800	2,400	25,000	142,400	8,000	25,700
1990 (f)	54,900	70,350	0	0	298,660	0	157,800	2,400	25,000	150,800	8,000	26,900

TABLE B-5A: ANNUAL WATER QUANTITIES DELIVERED

(in acre-feet)<sup>(b)</sup>

Sheet 3 of 6

Calendar Year	CALIFORNIA AQUEDUCT (continued)										
	SOUTH SAN JOAQUIN DIVISION (continued)							TEHACHAPI DIVISION	MOJAVE DIVISION		
	Reach 14 A		Reach 14 B	Reach 14 C	Reach 15 A	Reach 16 A		Reach 17 E	Reach 18 A	Reach 19	Reach 19 C
	KCWA (M&I)	KCWA (Ag.)	KCWA (Ag.)	KCWA (Ag.)	KCWA (Ag.)	KQWA (M&I)	KCWA (Ag.)	KCWA (M&I)	AVEKWA	AVEKWA	AVEKWA
	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)	(45)	(46)
1970	0	0	3	0	0	0	0	0	0	0	0
1971	0	23,844	49,929	24,187	3,552	0	0	0	0	0	0
1972	0	26,621	77,034	35,016	6,064	0	4,768	0	0	0	0
1973	0	15,328	47,040	19,043	19,916	0	1,961	0	0	0	0
1974	0	7,794	32,356	12,601	18,000	3,000	1,564	0	0	1,223	0
1975	0	10,306	27,736	12,783	35,420	3,200	9,867	0	0	7,622	0
1976	0	0	21,147	0	44,900	3,500	12,362	0	1,635	25,065	6,000
1977	0	0	20,500	0	49,500	3,800	12,100	1,000	1,635	25,065	14,270
1978	0	0	22,400	0	49,500	4,100	22,700	1,500	1,635	25,065	16,670
1979	0	0	25,600	0	49,500	4,400	31,800	1,500	1,635	25,065	22,090
1980	0	0	31,500	0	49,500	4,800	39,100	1,600	1,635	25,065	27,725
1981	0	17,371	31,500	0	49,500	5,200	39,438	1,800	1,635	25,065	32,670
1982	0	29,000	31,500	0	49,500	5,700	39,500	2,000	1,635	25,065	38,275
1983	6,430	30,300	44,100	4,300	50,700	6,300	43,500	2,000	623	3,000	39,310
1984	7,070	31,700	50,200	8,600	51,300	7,200	45,500	2,000	3,787	3,450	40,350
1985	7,700	33,100	56,500	12,800	51,900	8,200	47,500	2,000	7,400	3,450	41,390
1986	9,500	34,500	62,200	16,800	52,500	9,400	49,100	2,000	6,890	3,450	42,430
1987	11,400	35,900	67,900	20,700	53,100	10,700	50,700	2,000	6,380	3,450	43,460
1988	13,200	37,300	73,600	24,600	53,700	12,300	52,200	2,000	5,200	4,100	44,500
1989	15,100	38,700	79,200	28,500	54,300	13,600	53,700	2,000	3,980	4,800	45,540
1990	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	2,800	5,470	46,580
1991	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	2,600	6,160	47,620
1992	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	2,400	6,840	48,660
1993	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	2,200	7,520	49,690
1994	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	1,700	8,210	50,730
1995	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	1,610	8,890	51,770
1996	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	2,590	9,580	52,810
1997	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	3,400	10,260	53,840
1998	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	4,200	10,940	54,880
1999	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	4,900	11,630	55,920
2000	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	5,810	12,310	56,960
2001	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	5,000	13,000	58,000
2002	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	5,000	13,000	58,000
2003	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	5,000	13,000	58,000
2004	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	5,000	13,000	58,000
2005	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	5,000	13,000	58,000
2006	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	5,000	13,000	58,000
2007	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	5,000	13,000	58,000
2008	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	5,000	13,000	58,000
2009	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	5,000	13,000	58,000
2010	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	5,000	13,000	58,000
2011	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	5,000	13,000	58,000
2012	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	5,000	13,000	58,000
2013	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	5,000	13,000	58,000
2014	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	5,000	13,000	58,000
2015	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	5,000	13,000	58,000
2016	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	5,000	13,000	58,000
2017	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	5,000	13,000	58,000
2018	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	5,000	13,000	58,000
2019	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	5,000	13,000	58,000
2020(f)	17,000	40,100	84,800	32,400	55,000	15,000	55,200	2,000	5,000	13,000	58,000

# FROM EACH AQUEDUCT REACH TO EACH CONTRACTOR <sup>(a)</sup>

(in acre-feet) <sup>(b)</sup>

Sheet 4 of 6

Calendar Year	CALIFORNIA AQUEDUCT -continued-										
	MOJAVE DIVISION -continued-										
	Reach 20 A	Reach 20 B	Reach 21		Reach 22 A	Reach 22 B				Reach 23	Reach 24
	AVEKWA	PWD	LCID	AVEKWA	AVEKWA	MWD-SC(g)	CVCWD(g)	DWA(g)	MWA	MWA	CLAWA
	(47)	(48)	(49)	(50)	(51)	(52)	(53)	(54)	(55)	(56)	(57)
1972	0	0	338	0	0	0	0	0	55	0	464
1973	0	0	290	0	0	14,800-	5,800	9,000	0	0	389
1974	0	0	400	0	0	16,400-	6,400	10,000	0	14	627
1975	420	0	520	0	0	18,000-	7,000	11,000	0	0	825
1976	885	0	640	1,000	0	19,600-	7,600	12,000	0	0	932
1977	8,005	100	730	1,000	0	21,421-	8,421	13,000	0	0	1,231
1978	11,805	300	920	1,000	800	23,242-	9,242	14,000	0	0	1,510
1979	12,155	600	1,040	1,150	880	25,063-	10,063	15,000	15,000	0	1,792
1980	12,655	1,000	1,150	1,175	920	27,884-	10,884	17,000	27,200	0	2,092
1981	13,305	1,500	1,270	1,225	975	31,105-	12,105	19,000	29,600	0	2,405
1982	15,825	3,000	1,380	1,255	1,020	34,326-	13,326	21,000	31,900	0	3,110
1983	15,200	4,300	1,500	1,770	1,335	37,547-	14,547	23,000	33,000	0	3,770
1984	16,580	5,600	1,610	1,285	1,650	40,768-	15,768	25,000	36,000	0	4,060
1985	17,960	6,900	1,730	1,790	1,965	43,989-	16,989	27,000	39,000	0	4,350
1986	19,330	8,300	1,840	2,305	2,280	47,210-	18,210	29,000	41,400	0	4,640
1987	20,710	9,700	1,960	2,820	2,595	50,931-	19,431	31,500	43,700	0	4,930
1988	22,090	11,000	2,070	3,335	2,910	54,652-	20,652	34,000	46,000	0	5,220
1989	23,470	12,400	2,190	3,850	3,225	58,373-	21,873	36,500	48,500	0	5,510
1990	24,850	13,800	2,300	4,355	3,540	61,200-	23,100	38,100	50,800	0	5,800
1991	26,220	15,600	2,300	4,870	3,855	61,200-	23,100	38,100	50,800	0	5,800
1992	27,600	17,300	2,300	5,385	4,170	61,200-	23,100	38,100	50,800	0	5,800
1993	28,980	17,300	2,300	5,900	4,485	61,200-	23,100	38,100	50,800	0	5,800
1994	30,350	17,300	2,300	6,415	4,800	61,200-	23,100	38,100	50,800	0	5,800
1995	31,730	17,300	2,300	6,920	5,115	61,200-	23,100	38,100	50,800	0	5,800
1996	33,110	17,300	2,300	7,435	5,430	61,200-	23,100	38,100	50,800	0	5,800
1997	34,490	17,300	2,300	7,950	5,745	61,200-	23,100	38,100	50,800	0	5,800
1998	35,870	17,300	2,300	8,465	6,060	61,200-	23,100	38,100	50,800	0	5,800
1999	37,250	17,300	2,300	8,980	6,375	61,200-	23,100	38,100	50,800	0	5,800
2000	38,620	17,300	2,300	9,485	6,690	61,200-	23,100	38,100	50,800	0	5,800
2001	40,000	17,300	2,300	10,000	7,000	61,200-	23,100	38,100	50,800	0	5,800
2002	40,000	17,300	2,300	10,000	7,000	61,200-	23,100	38,100	50,800	0	5,800
2003	40,000	17,300	2,300	10,000	7,000	61,200-	23,100	38,100	50,800	0	5,800
2004	40,000	17,300	2,300	10,000	7,000	61,200-	23,100	38,100	50,800	0	5,800
2005	40,000	17,300	2,300	10,000	7,000	61,200-	23,100	38,100	50,800	0	5,800
2006	40,000	17,300	2,300	10,000	7,000	61,200-	23,100	38,100	50,800	0	5,800
2007	40,000	17,300	2,300	10,000	7,000	61,200-	23,100	38,100	50,800	0	5,800
2008	40,000	17,300	2,300	10,000	7,000	61,200-	23,100	38,100	50,800	0	5,800
2009	40,000	17,300	2,300	10,000	7,000	61,200-	23,100	38,100	50,800	0	5,800
2010	40,000	17,300	2,300	10,000	7,000	61,200-	23,100	38,100	50,800	0	5,800
2011	40,000	17,300	2,300	10,000	7,000	0	23,100	38,100	50,800	0	5,800
2012	40,000	17,300	2,300	10,000	7,000	0	23,100	38,100	50,800	0	5,800
2013	40,000	17,300	2,300	10,000	7,000	0	23,100	38,100	50,800	0	5,800
2014	40,000	17,300	2,300	10,000	7,000	0	23,100	38,100	50,800	0	5,800
2015	40,000	17,300	2,300	10,000	7,000	0	23,100	38,100	50,800	0	5,800
2016	40,000	17,300	2,300	10,000	7,000	0	23,100	38,100	50,800	0	5,800
2017	40,000	17,300	2,300	10,000	7,000	0	23,100	38,100	50,800	0	5,800
2018	40,000	17,300	2,300	10,000	7,000	0	23,100	38,100	50,800	0	5,800
2019	40,000	17,300	2,300	10,000	7,000	0	23,100	38,100	50,800	0	5,800
2020(f)	40,000	17,300	2,300	10,000	7,000	0	23,100	38,100	50,800	0	5,800

g) In accordance with the Exchange Agreement between the noted agencies, Metropolitan Water District assumed responsibility for repayment of variable OMP&R costs on the exchange water in reaches beyond Reach 22B, and Desert Water Agency and Coachella Valley County Water District for such costs from the Delta through Reach 22B. The adjustment in deliveries shown in Column 52 provides for compliance with the repayment of the Agreement.

TABLE B-5A: ANNUAL WATER QUANTITIES DELIVERED

(in acre-feet)<sup>(b)</sup>

Sheet 5 of 6

Calendar Year	CALIFORNIA AQUEDUCT (continued)							
	SANTA ANA DIVISION							
	Reach 26 A				Reach 28 G		Reach 28 H	Reach 28 J
	MWD-SC	SBVMWD	SGVMWD	SGPWA	MWD-SC	SBVMWD	MWD-SC	MWD-SC
	(58)	(59)	(60)	(61)	(62)	(63)	(64)	(65)
1972	0	1,275	0	0	0	0	0	0
1973	444	32,426	0	0	18,942	0	0	0
1974	84,979	16,605	612	0	0	0	0	0
1975	170,427	13,865	5,450	0	0	0	0	251
1976	231,600	55,000	10,000	0	0	0	90	0
1977	422,600	57,500	10,000	0	0	0	0	156,800
1978	346,100	60,000	10,500	0	0	0	115,400	129,200
1979	358,000	62,500	12,600	0	0	0	124,200	129,400
1980	348,500	65,500	14,700	6,800	0	0	132,700	136,500
1981	344,200	68,500	16,650	7,800	0	0	135,400	138,100
1982	335,000	71,500	17,200	8,800	0	0	136,500	146,200
1983	323,147	73,500	17,400	9,800	0	1,000	124,333	171,033
1984	310,074	76,500	17,600	10,800	0	1,500	112,167	195,867
1985	297,000	79,500	17,800	11,800	0	2,000	100,000	220,700
1986	287,000	82,000	18,060	12,900	0	3,000	102,000	228,700
1987	268,000	85,000	18,320	14,000	0	4,000	104,000	245,700
1988	246,000	87,000	18,580	15,100	0	6,000	106,000	265,700
1989	244,773	89,000	18,840	16,200	0	8,000	87,300	285,700
1990	247,200	91,000	19,100	17,300	0	10,500	59,800	310,700
1991	248,300	91,000	19,360	17,300	0	11,600	53,700	315,700
1992	248,300	91,000	19,620	17,300	0	11,600	48,700	320,700
1993	248,300	91,000	19,880	17,300	0	11,600	43,700	325,700
1994	248,300	91,000	20,140	17,300	0	11,600	38,700	330,700
1995	248,300	91,000	20,400	17,300	0	11,600	33,700	335,700
1996	248,300	91,000	20,660	17,300	0	11,600	28,700	340,700
1997	248,300	91,000	20,920	17,300	0	11,600	23,700	345,700
1998	248,300	91,000	21,180	17,300	0	11,600	18,700	350,700
1999	248,300	91,000	21,440	17,300	0	11,600	13,700	355,700
2000	248,300	91,000	21,700	17,300	0	11,600	8,700	360,700
2001	248,300	91,000	21,980	17,300	0	11,600	5,700	363,700
2002	248,300	91,000	22,260	17,300	0	11,600	2,700	366,700
2003	248,000	91,000	22,540	17,300	0	11,600	0	369,700
2004	245,000	91,000	22,820	17,300	0	11,600	0	372,700
2005	242,000	91,000	23,100	17,300	0	11,600	0	375,700
2006	242,000	91,000	23,400	17,300	0	11,600	0	375,700 <sup>a</sup>
2007	242,000	91,000	23,700	17,300	0	11,600	0	375,700
2008	242,000	91,000	24,000	17,300	0	11,600	0	375,700
2009	242,000	91,000	24,300	17,300	0	11,600	0	375,700
2010	242,000	91,000	24,600	17,300	0	11,600	0	375,700
2011	180,800	91,000	24,900	17,300	0	11,600	0	375,700
2012	180,800	91,000	25,200	17,300	0	11,600	0	375,700
2013	180,800	91,000	25,500	17,300	0	11,600	0	375,700
2014	180,800	91,000	25,800	17,300	0	11,600	0	375,700
2015	180,800	91,000	26,100	17,300	0	11,600	0	375,700
2016	180,800	91,000	26,500	17,300	0	11,600	0	375,700
2017	180,800	91,000	26,900	17,300	0	11,600	0	375,700
2018	180,800	91,000	27,300	17,300	0	11,600	0	375,700
2019	180,800	91,000	27,700	17,300	0	11,600	0	375,700
2020(f)	180,800	91,000	28,800	17,300	0	11,600	0	375,700

# FROM EACH AQUEDUCT REACH TO EACH CONTRACTOR (a)

(in acre-feet) (b)

Sheet 6 of 6

Calendar Year	CALIFORNIA AQUEDUCT (continued)										Total California Aqueduct
	WEST BRANCH, CALIFORNIA AQUEDUCT				COASTAL BRANCH, CALIFORNIA AQUEDUCT						
	Reach 29 F	Reach 30			Reach 31 A		Reach 33 A	Reach 34	Reach 35		
		AVEKWA	MWD-SC	VCFC	CLWA	KCWA (Ag.)	DDWD	SLOC FC&WCD	SLOC FC&WCD	SLOC FC&WCD	
	(66)	(67)	(68)	(69)	(70)	(71)	(72)	(73)	(74)	(75)	(76)
1968	0	0	0	0	71,657	7,382	0	0	0	0	192,188
1969	0	0	0	0	52,094	9,970	0	0	0	0	195,705
1970	0	0	0	0	71,910	11,739	0	0	0	0	276,211
1971	0	0	0	0	98,481	12,490	0	0	0	0	553,081
1972	53	71,938	0	0	107,850	13,905	0	0	0	0	895,006
1973	20	155,297	0	0	69,227	9,418	0	0	0	0	638,930
1974	36	209,136	0	0	68,474	9,700	0	0	0	0	783,982
1975	26	374,280	0	0	74,516	10,700	0	0	0	0	1,130,195
1976	25	386,500	0	0	78,865	11,700	0	0	0	0	1,254,972
1977	25	196,200	0	0	84,800	12,700	0	0	0	0	1,449,261
1978	25	199,700	0	0	91,800	12,700	0	0	0	0	1,572,230
1979	25	202,800	0	0	98,200	12,700	0	0	0	0	1,678,632
1980	25	205,200	1,000	6,000	104,500	12,700	0	0	0	0	1,782,542
1981	125	207,800	2,000	8,000	111,400	12,700	0	0	0	0	1,866,725
1982	225	226,300	3,000	10,000	117,200	12,700	1,000	0	0	0	1,965,390
1983	495	303,300	4,000	10,125	93,500	12,700	1,200	600	1,200	6,900	2,106,341
1984	765	380,300	5,000	12,162	96,200	12,700	1,798	906	1,796	10,400	2,269,907
1985	1,045	457,300	6,000	14,200	98,800	12,700	1,946	973	1,946	17,300	2,434,545
1986	1,315	490,300	8,000	15,900	101,400	12,700	2,228	1,113	2,228	23,100	2,549,909
1987	1,585	513,300	10,000	17,600	104,000	12,700	2,509	1,255	2,509	28,800	2,657,483
1988	1,865	537,300	13,000	19,300	106,600	12,700	2,791	1,395	2,791	35,800	2,763,847
1989	2,135	702,300	16,000	21,000	109,200	12,700	3,072	1,537	3,072	46,100	3,001,594
1990	2,405	737,300	20,000	22,700	111,950	12,700	3,354	1,677	3,354	56,200	3,117,885
1991	2,675	792,300	20,000	23,440	111,950	12,700	3,762	1,880	3,762	57,700	3,183,304
1992	2,945	847,300	20,000	24,180	111,950	12,700	4,169	2,085	4,169	57,700	3,246,023
1993	3,225	902,300	20,000	24,920	111,950	12,700	4,577	2,288	4,577	57,700	3,307,042
1994	3,795	957,300	20,000	25,660	111,950	12,700	4,984	2,493	4,984	57,700	3,368,061
1995	3,765	1,012,300	20,000	26,400	111,950	12,700	5,392	2,696	5,392	57,700	3,429,080
1996	4,045	1,039,300	20,000	27,140	111,950	12,700	5,796	2,899	5,796	57,700	3,463,091
1997	4,315	1,066,300	20,000	27,880	111,950	12,700	6,201	3,100	6,201	57,700	3,497,102
1998	4,585	1,093,300	20,000	28,620	111,950	12,700	6,606	3,301	6,606	57,700	3,531,113
1999	4,855	1,120,300	20,000	29,360	111,950	12,700	7,010	3,504	7,010	57,700	3,565,124
2000	5,125	1,147,300	20,000	30,100	111,950	12,700	7,414	3,707	7,414	57,700	3,599,135
2001	5,400	1,166,300	20,000	31,280	111,950	12,700	7,931	3,965	7,931	57,700	3,624,287
2002	5,400	1,185,300	20,000	32,460	111,950	12,700	8,448	4,223	8,448	57,700	3,646,039
2003	5,400	1,204,300	20,000	33,640	111,950	12,700	8,965	4,481	8,965	57,700	3,667,791
2004	5,400	1,223,300	20,000	34,820	111,950	12,700	9,482	4,739	9,482	57,700	3,689,543
2005	5,400	1,242,300	20,000	36,000	111,950	12,700	10,000	5,000	10,000	57,700	3,711,300
2006	5,400	1,257,300	20,000	37,100	111,950	12,700	10,000	5,000	10,000	57,700	3,727,700
2007	5,400	1,272,300	20,000	38,200	111,950	12,700	10,000	5,000	10,000	57,700	3,744,100
2008	5,400	1,287,300	20,000	39,300	111,950	12,700	10,000	5,000	10,000	57,700	3,760,500
2009	5,400	1,302,300	20,000	40,400	111,950	12,700	10,000	5,000	10,000	57,700	3,776,900
2010	5,400	1,317,300	20,000	41,500	111,950	12,700	10,000	5,000	10,000	57,700	3,793,300
2011	5,400	1,332,840	20,000	41,500	111,950	12,700	10,000	5,000	10,000	57,700	3,809,140
2012	5,400	1,348,380	20,000	41,500	111,950	12,700	10,000	5,000	10,000	57,700	3,824,980
2013	5,400	1,363,920	20,000	41,500	111,950	12,700	10,000	5,000	10,000	57,700	3,840,820
2014	5,400	1,379,460	20,000	41,500	111,950	12,700	10,000	5,000	10,000	57,700	3,856,660
2015	5,400	1,395,000	20,000	41,500	111,950	12,700	10,000	5,000	10,000	57,700	3,872,500
2016	5,400	1,395,000	20,000	41,500	111,950	12,700	10,000	5,000	10,000	57,700	3,872,900
2017	5,400	1,395,000	20,000	41,500	111,950	12,700	10,000	5,000	10,000	57,700	3,873,300
2018	5,400	1,395,000	20,000	41,500	111,950	12,700	10,000	5,000	10,000	57,700	3,873,700
2019	5,400	1,395,000	20,000	41,500	111,950	12,700	10,000	5,000	10,000	57,700	3,874,100
2020(f)	5,400	1,395,000	20,000	41,500	111,950	12,700	10,000	5,000	10,000	57,700	3,875,200

TABLE B-5B: ANNUAL WATER QUANTITIES

(in acre-feet)<sup>(b)</sup>

Sheet 1 of 4

Calendar Year	NORTH BAY AREA (c)			SOUTH BAY AREA (d)				CENTRAL COASTAL AREA		
	Napa County FC & WCD	Solano County FC & WCD	Total	Alameda County FC & WCD Zone 7	Alameda County Water District	Santa Clara Valley Water District	Total	San Luis Obispo County FC & WCD	Santa Barbara County FC & WCD	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1962	0	0	0	494	8,412	0	8,906	0	0	0
1963	0	0	0	1,731	10,914	0	12,645	0	0	0
1964	0	0	0	1,673	19,238	0	20,911	0	0	0
1965	0	0	0	2,605	16,407	15,014	34,026	0	0	0
1966	0	0	0	5,511	14,864	34,538	54,913	0	0	0
1967	0	0	0	4,780	12,882	39,101	56,763	0	0	0
1968	1,214	0	1,214	6,133	24,817	70,105	101,055	0	0	0
1969	2,687	0	2,687	6,635	813	62,264	69,712	0	0	0
1970	3,618	0	3,618	9,249	0	80,311	89,560	0	0	0
1971	2,521	0	2,521	5,017	5,961	87,606	98,584	0	0	0
1972	3,647	0	3,647	10,489	27,671	100,266	138,426	0	0	0
1973	3,792	0	3,792	2,975	2,521	88,582	94,078	0	0	0
1974	4,870	0	4,870	1,314	4	88,000	89,318	0	0	0
1975	6,840	0	6,840	4,618	986	88,000	93,604	0	0	0
1976	5,395	0	5,395	17,200	21,300	88,000	126,500	0	0	0
1977	5,455	0	5,455	18,400	22,200	88,000	128,600	0	0	0
1978	5,495	0	5,495	19,600	23,100	88,000	130,700	0	0	0
1979	5,550	0	5,550	20,800	23,900	88,000	132,700	0	0	0
1980	5,605	0	5,605	22,000	24,800	88,000	134,800	0	0	0
1981	5,655	8,000	13,655	23,000	26,000	88,000	137,000	0	0	0
1982	5,700	9,400	15,100	24,000	27,200	88,000	139,200	1,000	0	1,000
1983	6,800	10,330	17,130	25,000	28,400	88,000	141,400	3,000	6,900	9,900
1984	7,900	11,160	19,060	26,000	29,600	88,000	143,600	4,500	10,400	14,900
1985	9,100	12,870	21,970	27,000	30,800	88,000	145,800	4,865	17,300	22,165
1986	9,400	15,240	24,640	28,000	32,100	88,000	148,100	5,569	23,100	28,669
1987	9,700	18,320	28,020	29,000	33,300	88,000	150,300	6,273	28,800	35,073
1988	10,000	24,900	34,900	30,000	34,500	88,000	152,500	6,977	35,800	42,777
1989	10,300	31,350	41,650	31,000	35,700	90,000	156,700	7,681	46,100	53,781
1990	10,700	37,800	48,500	32,000	36,900	92,000	160,900	8,385	56,200	64,585
1991	11,000	37,800	48,800	32,800	38,400	94,000	165,200	9,404	57,700	67,104
1992	11,400	37,800	49,200	33,600	39,900	96,000	169,500	10,423	57,700	68,123
1993	11,700	37,800	49,500	34,400	41,400	98,000	173,800	11,442	57,700	69,142
1994	12,100	37,800	49,900	35,200	42,000	100,000	177,200	12,461	57,700	70,161
1995	12,400	37,800	50,200	36,000	42,000	100,000	178,000	13,480	57,700	71,180
1996	12,800	37,800	50,600	36,800	42,000	100,000	178,800	14,491	57,700	72,191
1997	13,200	37,800	51,000	37,600	42,000	100,000	179,600	15,502	57,700	73,202
1998	13,600	37,800	51,400	38,400	42,000	100,000	180,400	16,513	57,700	74,213
1999	14,000	37,800	51,800	39,200	42,000	100,000	181,200	17,524	57,700	75,224
2000	14,400	37,800	52,200	40,000	42,000	100,000	182,000	18,535	57,700	76,235
2001	14,700	37,800	52,500	40,800	42,000	100,000	182,800	19,827	57,700	77,527
2002	15,000	37,800	52,800	41,600	42,000	100,000	183,600	21,119	57,700	78,819
2003	15,300	37,800	53,100	42,400	42,000	100,000	184,400	22,411	57,700	80,111
2004	15,600	37,800	53,400	43,200	42,000	100,000	185,200	23,703	57,700	81,403
2005	15,900	37,800	53,700	44,000	42,000	100,000	186,000	25,000	57,700	82,700
2006	16,300	37,800	54,100	44,400	42,000	100,000	186,400	25,000	57,700	82,700
2007	16,700	37,800	54,500	44,800	42,000	100,000	186,800	25,000	57,700	82,700
2008	17,000	37,800	54,800	45,200	42,000	100,000	187,200	25,000	57,700	82,700
2009	17,400	37,800	55,200	45,600	42,000	100,000	187,600	25,000	57,700	82,700
2010	17,800	37,800	55,600	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2011	18,200	37,800	56,000	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2012	18,600	37,800	56,400	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2013	19,000	37,800	56,800	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2014	19,500	37,800	57,300	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2015	20,000	37,800	57,800	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2016	20,500	37,800	58,300	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2017	21,000	37,800	58,800	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2018	21,500	37,800	59,300	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2019	22,000	37,800	59,800	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2020	25,000	37,800	62,800	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2021	25,000	37,800	62,800	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2022	25,000	37,800	62,800	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2023	25,000	37,800	62,800	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2024	25,000	37,800	62,800	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2025	25,000	37,800	62,800	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2026	25,000	37,800	62,800	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2027	25,000	37,800	62,800	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2028	25,000	37,800	62,800	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2029	25,000	37,800	62,800	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2030	25,000	37,800	62,800	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2031	25,000	37,800	62,800	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2032	25,000	37,800	62,800	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2033	25,000	37,800	62,800	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2034	25,000	37,800	62,800	46,000	42,000	100,000	188,000	25,000	57,700	82,700
2035	25,000	37,800	62,800	46,000	42,000	100,000	188,000	25,000	57,700	82,700
TOTAL	1,010,544	1,880,370	2,890,914	2,388,224	2,458,990	6,567,787	11,415,001	1,050,085	2,821,100	3,871,185

- a) Includes surplus water delivered prior to May 1, 1973 and nonproject water.  
b) Metric conversion is acre-feet times 1.2335 equals cubic dekametres.  
c) For the period 1968 through 1980, annual quantities delivered are non-project water pumped through an interim facility.  
d) For the period June 1962 through November 1967, deliveries were supplied by nonproject water.



# DELIVERED TO EACH CONTRACTOR<sup>(a)</sup>

(in acre-feet)<sup>(b)</sup>

Sheet 2 of 4

Calendar Year	SAN JOAQUIN VALLEY AREA								
	Devil's Den Water District	Dudley Ridge Water District	Empire West Side Irrigation District	Hacienda Water District	Kern County Water Agency	County of Kings	Oak Flat Water District	Tulare Lake Basin Water Storage District	Total
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1962	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0
1968	7,382	26,360	1,978	0	127,384	900	3,084	25,100	192,188
1969	9,970	31,375	56	2,842	141,265	100	3,016	7,081	195,705
1970	11,739	40,407	3,942	9,578	204,634	0	5,911	0	276,211
1971	12,490	41,053	5,990	6,659	360,151	3,700	7,212	115,826	553,081
1972	13,905	42,443	5,795	5,851	490,781	1,400	8,166	252,542	820,883
1973	9,418	22,057	3,000	2,900	341,469	1,500	3,214	47,564	431,122
1974	9,700	33,390	3,000	3,300	347,000	1,500	3,471	68,989	470,350
1975	10,700	40,555	3,000	3,758	410,820	1,600	3,576	82,500	556,509
1976	11,700	28,300	3,000	3,900	432,800	1,600	3,500	50,800	535,600
1977	12,700	30,400	3,000	4,200	483,600	1,700	3,700	54,800	594,100
1978	12,700	32,500	3,000	4,600	534,300	1,900	3,900	58,700	651,600
1979	12,700	34,600	3,000	4,900	583,900	2,000	4,000	62,600	707,700
1980	12,700	36,700	3,000	5,200	634,500	2,200	4,200	66,500	765,000
1981	12,700	38,800	3,000	5,600	691,400	2,300	4,300	70,400	828,500
1982	12,700	41,000	3,000	5,900	745,300	2,500	4,500	74,300	889,200
1983	12,700	42,900	3,000	6,200	805,100	2,800	4,600	78,200	955,500
1984	12,700	45,100	3,000	6,500	860,600	3,100	4,800	82,100	1,017,900
1985	12,700	47,200	3,000	6,900	915,000	3,400	4,900	86,000	1,079,100
1986	12,700	49,300	3,000	7,200	968,200	3,700	5,100	90,000	1,139,200
1987	12,700	51,400	3,000	7,500	1,023,500	4,000	5,200	93,900	1,201,200
1988	12,700	53,500	3,000	7,800	1,074,600	4,000	5,400	97,800	1,258,800
1989	12,700	55,600	3,000	8,200	1,112,300	4,000	5,600	101,700	1,303,100
1990	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
1991	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
1992	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
1993	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
1994	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
1995	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
1996	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
1997	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
1998	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
1999	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2000	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2001	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2002	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2003	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2004	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2005	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2006	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2007	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2008	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2009	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2010	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2011	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2012	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2013	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2014	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2015	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2016	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2017	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2018	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2019	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2020	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2021	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2022	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2023	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2024	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2025	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2026	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2027	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2028	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2029	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2030	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2031	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2032	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2033	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2034	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
2035	12,700	57,700	3,000	8,500	1,153,400	4,000	5,700	110,000	1,355,000
TOTAL	846,304	3,519,140	206,761	510,488	66,345,004	233,900	363,550	6,727,402	78,752,549

TABLE B-5B: ANNUAL WATER QUANTITIES

in acre-feet<sup>(b)</sup>

Sheet 3 of 4

Calendar Year	SOUTHERN CALIFORNIA AREA									
	Antelope Valley-East Kern Water Agency	Castaic Lake Water Agency	Coachella Valley County Water District	Crestline Lake Arrowhead Water Agency	Desert Water Agency	Littlerock Creek Irrigation District	Mojave Water Agency	Palmdate Water District	San Bernardino Valley Municipal Water District	San Gabriel Valley Municipal Water District
	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
1962	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0
1972	53	0	0	464	0	338	55	0	1,275	0
1973	20	0	5,800	389	9,000	290	0	0	32,426	0
1974	1,259	0	6,400	627	10,000	400	14	0	16,605	612
1975	8,068	0	7,000	825	11,000	520	0	0	13,865	5,450
1976	34,610	0	7,600	932	12,000	640	0	0	55,000	10,000
1977	50,000	0	8,421	1,231	13,000	730	0	100	57,500	10,000
1978	57,000	0	9,242	1,510	14,000	920	0	300	60,000	10,500
1979	63,000	0	10,063	1,792	15,000	1,040	15,000	600	62,500	12,600
1980	69,200	6,000	10,884	2,092	17,000	1,150	27,200	1,000	65,500	14,700
1981	75,000	8,000	12,105	2,405	19,000	1,270	29,600	1,500	68,500	16,650
1982	81,300	10,000	13,326	3,110	21,000	1,380	31,900	3,000	71,500	17,200
1983	60,733	10,125	14,547	3,770	23,000	1,500	33,000	4,300	74,500	17,400
1984	67,867	12,162	15,768	4,060	25,000	1,610	36,000	5,600	78,000	17,600
1985	75,000	14,200	16,989	4,350	27,000	1,730	39,000	6,900	81,500	17,800
1986	78,000	15,900	18,210	4,640	29,000	1,840	41,400	8,300	85,000	18,060
1987	81,000	17,600	19,431	4,930	31,500	1,960	43,700	9,700	89,000	18,320
1988	84,000	19,300	20,652	5,220	34,000	2,070	46,000	11,000	93,000	18,580
1989	87,000	21,000	21,873	5,510	36,500	2,190	48,500	12,400	97,000	18,840
1990	90,000	22,700	23,100	5,800	38,100	2,300	50,800	13,800	101,500	19,100
1991	94,000	23,440	23,100	5,800	38,100	2,300	50,800	15,600	102,600	19,360
1992	98,000	24,180	23,100	5,800	38,100	2,300	50,800	17,300	102,600	19,620
1993	102,000	24,920	23,100	5,800	38,100	2,300	50,800	17,300	102,600	19,880
1994	106,000	25,660	23,100	5,800	38,100	2,300	50,800	17,300	102,600	20,140
1995	110,000	26,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	20,400
1996	115,000	27,140	23,100	5,800	38,100	2,300	50,800	17,300	102,600	20,660
1997	120,000	27,880	23,100	5,800	38,100	2,300	50,800	17,300	102,600	20,920
1998	125,000	28,620	23,100	5,800	38,100	2,300	50,800	17,300	102,600	21,180
1999	130,000	29,360	23,100	5,800	38,100	2,300	50,800	17,300	102,600	21,440
2000	135,000	30,100	23,100	5,800	38,100	2,300	50,800	17,300	102,600	21,700
2001	138,400	31,280	23,100	5,800	38,100	2,300	50,800	17,300	102,600	21,980
2002	138,400	32,460	23,100	5,800	38,100	2,300	50,800	17,300	102,600	22,260
2003	138,400	33,640	23,100	5,800	38,100	2,300	50,800	17,300	102,600	22,540
2004	138,400	34,820	23,100	5,800	38,100	2,300	50,800	17,300	102,600	22,820
2005	138,400	36,000	23,100	5,800	38,100	2,300	50,800	17,300	102,600	23,100
2006	138,400	37,100	23,100	5,800	38,100	2,300	50,800	17,300	102,600	23,400
2007	138,400	38,200	23,100	5,800	38,100	2,300	50,800	17,300	102,600	23,700
2008	138,400	39,300	23,100	5,800	38,100	2,300	50,800	17,300	102,600	24,000
2009	138,400	40,400	23,100	5,800	38,100	2,300	50,800	17,300	102,600	24,300
2010	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	24,600
2011	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	24,900
2012	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	25,200
2013	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	25,500
2014	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	25,800
2015	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	26,100
2016	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	26,500
2017	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	26,900
2018	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	27,300
2019	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	27,700
2020	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,000
2021	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,000
2022	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,000
2023	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,000
2024	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,000
2025	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,000
2026	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,000
2027	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,000
2028	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,000
2029	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,000
2030	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,000
2031	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,000
2032	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,000
2033	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,000
2034	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,000
2035	138,400	41,500	23,100	5,800	38,100	2,300	50,800	17,300	102,600	28,000
TOTAL	7,042,110	1,826,887	1,280,911	314,657	2,099,600	127,378	2,728,169	855,300	5,821,171	1,378,112

# DELIVERED TO EACH CONTRACTOR<sup>(a)</sup>

(in acre-feet)<sup>(b)</sup>

Sheet 4 of 4

Calendar Year	SOUTHERN CALIFORNIA AREA (continued)				FEATHER RIVER AREA				TOTAL STATE WATER PROJECT
	San Geronio Pass Water Agency	The Metropolitan Water District of Southern California(e)	Ventura County Flood Control District	Total	City of Yuba City	County of Butte	Plumas County FC & WCD	Total	
	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)
1962	0	0	0	0	0	0	0	0	8,906
1963	0	0	0	0	0	0	0	0	12,645
1964	0	0	0	0	0	0	0	0	20,911
1965	0	0	0	0	0	0	0	0	34,026
1966	0	0	0	0	0	0	0	0	54,913
1967	0	0	0	0	0	0	0	0	56,763
1968	0	0	0	0	0	0	0	0	294,457
1969	0	0	0	0	0	0	0	0	268,104
1970	0	0	0	0	0	0	70	70	369,459
1971	0	0	0	0	0	192	64	256	654,442
1972	0	71,938	0	74,123	0	186	505	691	1,037,770
1973	0	159,883	0	207,808	0	53	679	732	737,532
1974	0	277,715	0	313,632	0	127	648	775	878,945
1975	0	526,958	0	573,686	0	253	405	658	1,231,297
1976	0	598,590	0	719,372	0	900	590	1,490	1,388,357
1977	0	754,179	0	895,161	0	1,050	620	1,670	1,624,986
1978	0	767,158	0	920,630	0	1,200	650	1,850	1,710,275
1979	0	789,337	0	970,932	0	1,350	680	2,030	1,818,157
1980	6,800	795,016	1,000	1,017,542	0	1,500	710	2,210	1,925,152
1981	7,800	794,395	2,000	1,038,225	4,200	5,450	740	10,390	2,027,770
1982	8,800	809,674	3,000	1,075,190	4,600	6,900	770	12,270	2,131,960
1983	9,800	884,266	4,000	1,140,941	5,050	8,350	800	14,200	2,279,071
1984	10,800	957,640	5,000	1,237,107	5,500	9,800	830	16,130	2,448,697
1985	11,800	1,031,011	6,000	1,333,280	5,950	12,250	860	19,060	2,621,375
1986	12,900	1,060,790	8,000	1,382,040	6,600	14,700	890	22,190	2,744,839
1987	14,000	1,080,069	10,000	1,421,210	7,300	17,150	920	25,370	2,861,173
1988	15,100	1,100,348	13,000	1,462,270	8,000	20,600	960	29,560	2,980,807
1989	16,200	1,261,700	16,000	1,644,713	8,800	24,050	1,000	33,850	3,233,794
1990	17,300	1,293,800	20,000	1,698,300	9,600	27,500	1,040	38,140	3,365,425
1991	17,300	1,348,800	20,000	1,761,200	9,600	27,500	1,080	38,180	3,435,484
1992	17,300	1,403,800	20,000	1,822,900	9,600	27,500	1,120	38,220	3,502,943
1993	17,300	1,458,800	20,000	1,882,900	9,600	27,500	1,160	38,260	3,568,602
1994	17,300	1,513,800	20,000	1,942,900	9,600	27,500	1,200	38,300	3,633,461
1995	17,300	1,568,800	20,000	2,002,900	9,600	27,500	1,250	38,350	3,695,630
1996	17,300	1,595,800	20,000	2,035,900	9,600	27,500	1,300	38,400	3,730,891
1997	17,300	1,622,800	20,000	2,068,900	9,600	27,500	1,350	38,450	3,766,152
1998	17,300	1,649,800	20,000	2,101,900	9,600	27,500	1,400	38,500	3,801,413
1999	17,300	1,676,800	20,000	2,134,900	9,600	27,500	1,450	38,550	3,836,674
2000	17,300	1,703,800	20,000	2,167,900	9,600	27,500	1,510	38,610	3,871,945
2001	17,300	1,722,800	20,000	2,191,760	9,600	27,500	1,570	38,670	3,898,257
2002	17,300	1,741,800	20,000	2,212,220	9,600	27,500	1,630	38,730	3,921,169
2003	17,300	1,760,800	20,000	2,232,680	9,600	27,500	1,690	38,790	3,944,081
2004	17,300	1,779,800	20,000	2,253,140	9,600	27,500	1,750	38,850	3,966,993
2005	17,300	1,798,800	20,000	2,273,600	9,600	27,500	1,810	38,910	3,989,910
2006	17,300	1,813,800	20,000	2,290,000	9,600	27,500	1,880	38,980	4,007,180
2007	17,300	1,828,800	20,000	2,306,400	9,600	27,500	1,950	39,050	4,024,450
2008	17,300	1,843,800	20,000	2,322,800	9,600	27,500	2,020	39,120	4,041,620
2009	17,300	1,858,800	20,000	2,339,200	9,600	27,500	2,090	39,190	4,058,890
2010	17,300	1,873,800	20,000	2,355,600	9,600	27,500	2,160	39,260	4,076,160
2011	17,300	1,889,340	20,000	2,371,440	9,600	27,500	2,240	39,340	4,092,480
2012	17,300	1,904,880	20,000	2,387,280	9,600	27,500	2,320	39,420	4,108,800
2013	17,300	1,920,420	20,000	2,403,120	9,600	27,500	2,410	39,510	4,125,130
2014	17,300	1,935,960	20,000	2,418,960	9,600	27,500	2,500	39,600	4,141,560
2015	17,300	1,951,500	20,000	2,434,800	9,600	27,500	2,600	39,700	4,158,000
2016	17,300	1,951,500	20,000	2,435,200	9,600	27,500	2,700	39,800	4,159,000
2017	17,300	1,951,500	20,000	2,435,600	9,600	27,500	2,700	39,800	4,159,900
2018	17,300	1,951,500	20,000	2,436,000	9,600	27,500	2,700	39,800	4,160,800
2019	17,300	1,951,500	20,000	2,436,400	9,600	27,500	2,700	39,800	4,161,700
2020	17,300	1,951,500	20,000	2,437,500	9,600	27,500	2,700	39,800	4,165,800
2021	17,300	1,951,500	20,000	2,437,500	9,600	27,500	2,700	39,800	4,165,800
2022	17,300	1,951,500	20,000	2,437,500	9,600	27,500	2,700	39,800	4,165,800
2023	17,300	1,951,500	20,000	2,437,500	9,600	27,500	2,700	39,800	4,165,800
2024	17,300	1,951,500	20,000	2,437,500	9,600	27,500	2,700	39,800	4,165,800
2025	17,300	1,951,500	20,000	2,437,500	9,600	27,500	2,700	39,800	4,165,800
2026	17,300	1,951,500	20,000	2,437,500	9,600	27,500	2,700	39,800	4,165,800
2027	17,300	1,951,500	20,000	2,437,500	9,600	27,500	2,700	39,800	4,165,800
2028	17,300	1,951,500	20,000	2,437,500	9,600	27,500	2,700	39,800	4,165,800
2029	17,300	1,951,500	20,000	2,437,500	9,600	27,500	2,700	39,800	4,165,800
2030	17,300	1,951,500	20,000	2,437,500	9,600	27,500	2,700	39,800	4,165,800
2031	17,300	1,951,500	20,000	2,437,500	9,600	27,500	2,700	39,800	4,165,800
2032	17,300	1,951,500	20,000	2,437,500	9,600	27,500	2,700	39,800	4,165,800
2033	17,300	1,951,500	20,000	2,437,500	9,600	27,500	2,700	39,800	4,165,800
2034	17,300	1,951,500	20,000	2,437,500	9,600	27,500	2,700	39,800	4,165,800
2035	17,300	1,951,500	20,000	2,437,500	9,600	27,500	2,700	39,800	4,165,800
TOTAL	909,800	97,212,567	988,000	122,584,662	497,600	1,391,061	111,871	2,000,532	221,514,843

e) Does not include cooling water for the proposed San Joaquin Nuclear Plant.

TABLE B-6: ANNUAL WATER QUANTITIES CONVEYED THRU EACH PUMPING

(in acre-feet)<sup>(b)</sup>

Sheet 1 of 8

Calendar Year	NORTH BAY AQUEDUCT							SOUTH BAY AQUEDUCT					
	CALHOUN AND TRAVIS PUMPING PLANTS			CORDELIA PUMPING PLANT				SOUTH BAY PUMPING PLANT					
	Operational Losses	Water Supply Delivery	Total	Initial Fill Water	Operational Losses	Water Supply Delivery (c)	Total	Initial Fill Water	Operational Losses	Reservoir Storage Changes	Deliveries		Total
											Water Supply (d)	Recreation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1962	0	0	0	0	0	0	0	9	272	0	8,906	0	9,187
1963	0	0	0	0	0	0	0	71	185	0	12,645	0	12,901
1964	0	0	0	0	0	0	0	171	152	0	20,911	0	21,234
1965	0	0	0	0	0	0	0	93	729	0	34,026	0	34,848
1966	0	0	0	0	0	0	0	0	1,746	0	54,913	0	56,659
1967	0	0	0	0	0	0	0	0	1,677	0	56,763	0	58,440
1968	0	0	0	24	-10	1,214	1,228	0	1,847	0	101,055	0	102,902
1969	0	0	0	0	2	2,687	2,689	3,449	2,668	0	69,712	0	75,829
1970	0	0	0	0	18	3,618	3,636	16,279	1,086	-5,355	89,560	0	101,570
1971	0	0	0	0	4	2,521	2,525	0	1,815	8,854	98,584	0	109,253
1972	0	0	0	0	-10	3,647	3,637	0	3,557	2,223	138,426	0	144,256
1973	0	0	0	0	1	3,792	3,793	0	-33	-1,510	94,078	0	92,535
1974	0	0	0	0	10	4,870	4,880	0	1,287	-10,056	89,318	0	80,549
1975	0	0	0	0	10	6,840	6,850	0	320	8,550	93,604	0	102,474
1976	0	0	0	0	0	5,395	5,395	0	4,185	0	126,500	180	130,865
1977	0	0	0	0	0	5,455	5,455	0	4,185	0	128,600	210	132,995
1978	0	0	0	0	0	5,495	5,495	0	4,185	0	130,700	240	135,125
1979	0	0	0	0	0	5,550	5,550	0	4,185	0	132,700	260	137,145
1980	0	0	0	0	0	5,605	5,605	0	4,185	0	134,800	280	139,265
1981	1,400	13,655	15,055	0	0	5,655	5,655	0	4,185	0	137,000	290	141,475
1982	1,400	15,100	16,500	0	0	5,700	5,700	0	4,185	0	139,200	300	143,685
1983	1,400	17,130	18,530	0	0	6,800	6,800	0	4,185	0	141,400	320	145,905
1984	1,400	19,060	20,460	0	0	7,900	7,900	0	4,179	0	143,600	330	148,109
1985	1,400	21,970	23,370	0	0	9,100	9,100	0	4,168	0	145,800	350	150,318
1986	1,400	24,640	26,040	0	0	9,400	9,400	0	4,152	0	148,100	360	152,612
1987	1,400	28,020	29,420	0	0	9,700	9,700	0	4,130	0	150,300	380	154,810
1988	1,400	34,900	36,300	0	0	10,000	10,000	0	4,108	0	152,500	400	157,008
1989	1,400	41,650	43,050	0	0	10,300	10,300	0	4,084	0	156,700	400	161,184
1990	1,400	48,500	49,900	0	0	10,700	10,700	0	4,045	0	160,900	400	165,345
1991	1,400	48,800	50,200	0	0	11,000	11,000	0	4,016	0	165,200	400	169,616
1992	1,400	49,200	50,600	0	0	11,400	11,400	0	3,987	0	169,500	400	173,887
1993	1,400	49,500	50,900	0	0	11,700	11,700	0	3,944	0	173,800	400	178,144
1994	1,400	49,900	51,300	0	0	12,100	12,100	0	3,982	0	177,200	400	181,582
1995	1,400	50,200	51,600	0	0	12,400	12,400	0	3,975	0	178,000	400	182,375
1996	1,400	50,600	52,000	0	0	12,800	12,800	0	3,966	0	178,800	400	183,166
1997	1,400	51,000	52,400	0	0	13,200	13,200	0	3,955	0	179,600	400	183,955
1998	1,400	51,400	52,800	0	0	13,600	13,600	0	3,945	0	180,400	400	184,745
1999	1,400	51,800	53,200	0	0	14,000	14,000	0	3,935	0	181,200	400	185,535
2000	1,400	52,200	53,600	0	0	14,400	14,400	0	3,924	0	182,000	400	186,324
2001	1,400	52,500	53,900	0	0	14,700	14,700	0	3,978	0	182,800	400	187,178
2002	1,400	52,800	54,200	0	0	15,000	15,000	0	3,969	0	183,600	400	187,969
2003	1,400	53,100	54,500	0	0	15,300	15,300	0	3,960	0	184,400	400	188,760
2004	1,400	53,400	54,800	0	0	15,600	15,600	0	3,951	0	185,200	400	189,551
2005	1,400	53,700	55,100	0	0	15,900	15,900	0	3,942	0	186,000	400	190,342
2006	1,400	54,100	55,500	0	0	16,300	16,300	0	3,938	0	186,400	400	190,738
2007	1,400	54,500	55,900	0	0	16,700	16,700	0	3,934	0	186,800	400	191,134
2008	1,400	54,800	56,200	0	0	17,000	17,000	0	3,930	0	187,200	400	191,530
2009	1,400	55,200	56,600	0	0	17,400	17,400	0	3,926	0	187,600	400	191,926
2010	1,400	55,600	57,000	0	0	17,800	17,800	0	3,922	0	188,000	400	192,322
2011	1,400	56,000	57,400	0	0	18,200	18,200	0	3,930	0	188,000	400	192,330
2012	1,400	56,400	57,800	0	0	18,600	18,600	0	3,930	0	188,000	400	192,330
2013	1,400	56,800	58,200	0	0	19,000	19,000	0	3,930	0	188,000	400	192,330
2014	1,400	57,300	58,700	0	0	19,500	19,500	0	3,930	0	188,000	400	192,330
2015	1,400	57,800	59,200	0	0	20,000	20,000	0	3,930	0	188,000	400	192,330
2016	1,400	58,300	59,700	0	0	20,500	20,500	0	3,930	0	188,000	400	192,330
2017	1,400	58,800	60,200	0	0	21,000	21,000	0	3,930	0	188,000	400	192,330
2018	1,400	59,300	60,700	0	0	21,500	21,500	0	3,930	0	188,000	400	192,330
2019	1,400	59,800	61,200	0	0	22,000	22,000	0	3,930	0	188,000	400	192,330
2020(e)	1,400	62,800	64,200	0	0	25,000	25,000	0	3,930	0	188,000	400	192,330

Note: "Reservoir Storage Changes" include projected net annual storage accretions (positive values) and withdrawals (negative values) for all down-aqueduct reservoirs of the project transportation facilities. Those variable OMP&R costs (Table B-12) that are allocable to storage accretions are assigned to the minimum OMP&R costs of the respective reservoirs.

"Water Supply Delivery" or "Deliveries, Water Supply", include certain hypothetical quantities to facilitate cost allocations for those years when deliveries are made from net annual storage withdrawals. The net annual amounts of storage withdrawals are hypothetically added to the actual amounts conveyed from the Delta to the reservoirs -- since deliveries made from storage withdrawals bear the same variable OMP&R costs per acre-foot as if the deliveries were actually conveyed, that year, from the Delta. The hypothetical increases in the amounts conveyed are compensated for by proportionate hypothetical increases in the actual variable OMP&R costs (Table B-3) of the up-aqueduct plants. The hypothetical increases in variable OMP&R costs for deliveries made from reservoir storage withdrawals are offset by equal credits to the minimum OMP&R costs of the respective reservoirs. Thus, the variable OMP&R components per acre-foot (Table B-17) may be applied to the total annual quantities delivered either from aqueduct reservoir storage or from the Delta.

"Conservation Water" includes the initial fill water, operational losses, and net annual storage changes associated with San Luis Reservoir (and the portion of the aqueduct that is allocated to conservation). The same allocation procedure outlined above for transportation facilities applies also to conservation facilities -- except that the hypothetical cost increases are added to the variable OMP&R costs to be reimbursed through the Transportation Charge, and deducted from the minimum OMP&R costs to be reimbursed through the Delta Water Charge.

a) Includes surplus water prior to May 1, 1973.

b) Metric conversion is acre-feet times 1.2335 equals cubic dekametre.

c) For the period 1968 through 1980, deliveries are from nonproject water pumped through an interim facility.

d) For the period June 1962 through November 1967, deliveries were nonproject water.

e) And each year thereafter for the remainder of the project repayment period.

# AND POWER RECOVERY PLANT OF PROJECT TRANSPORTATION FACILITIES<sup>(a)</sup>

(in acre-feet)<sup>(b)</sup>

Sheet 2 of 8

Calendar Year	CALIFORNIA AQUEDUCT														
	NORTH SAN JOAQUIN DIVISION								SAN LUIS DIVISION						
	DELTA PUMPING PLANT								DOS AMIGOS PUMPING PLANT						
	Transportation Water						Conservation Water	Total	Initial Fill Water	Operational Losses	Reservoir Storage Changes	Deliveries		Total	
	Initial Fill Water	Operational Losses	Reservoir Storage Changes	Water Supply	Recreation	Total						Water Supply	Recreation		
	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	
1967	5,746	1,183	0	11,538	0	18,467	2,957	21,424	0	0	0	0	0	0	
1968	11,079	74,464	0	293,243	0	378,786	531,275	910,061	11,079	25,126	0	189,104	0	225,309	
1969	7,336	44,287	0	265,417	0	317,040	531,185	848,225	3,887	9,922	0	192,689	0	206,498	
1970	23,947	20,767	-5,355	365,771	0	405,130	-12,995	392,135	7,668	1,901	0	270,300	0	279,869	
1971	23,207	-10,754	8,854	651,665	8	672,980	7,708	680,688	23,207	-12,030	0	545,869	0	557,046	
1972	145,066	9,057	-4,285	1,033,432	6,489	1,189,759	48,300	1,238,059	145,066	-6,635	-6,558	886,840	6,481	1,025,194	
1973	214,941	-4,951	2,902	733,080	1,083	947,055	55,846	1,002,901	214,941	-6,778	1,329	635,788	1,075	846,355	
1974	256,960	-11,524	-41,576	873,300	2,118	1,079,278	54,683	1,133,961	256,960	-16,763	-24,361	780,511	2,108	998,455	
1975	110,149	-8,092	16,101	1,223,799	3,377	1,345,334	-102,625	1,242,709	110,149	-12,144	-693	1,126,619	3,358	1,227,289	
1976	77,354	142,633	16,631	1,381,472	6,121	1,624,211	168,364	1,792,575	77,354	121,634	16,631	1,251,472	5,300	1,472,391	
1977	4,360	142,235	-35,852	1,617,861	6,606	1,735,210	-131,745	1,603,465	4,360	121,236	-35,852	1,485,561	5,755	1,581,060	
1978	4,360	142,413	16,492	1,702,930	7,116	1,873,311	-183,407	1,689,904	4,360	121,414	16,492	1,568,330	6,230	1,716,826	
1979	0	142,600	12,722	1,811,332	7,542	1,974,196	171,657	2,145,853	0	121,601	12,722	1,674,632	6,630	1,815,585	
1980	0	142,122	-17,858	1,917,342	8,067	2,049,673	-100,550	1,949,123	0	121,123	-17,858	1,778,342	7,130	1,888,737	
1981	0	141,880	6,184	2,003,725	17,204	2,168,993	49,524	2,218,517	0	120,881	6,184	1,862,425	15,705	2,005,195	
1982	0	144,385	-17,876	2,104,590	21,709	2,252,808	-114,586	2,138,222	0	123,386	-17,876	1,960,890	19,650	2,086,050	
1983	2	143,986	-27,434	2,247,741	23,670	2,387,965	179,005	2,566,970	2	122,987	-27,434	2,101,741	19,650	2,216,946	
1984	0	143,785	32,886	2,413,507	23,780	2,613,958	-103,322	2,510,636	0	122,792	32,886	2,265,107	19,650	2,440,435	
1985	0	144,326	-15,112	2,580,345	23,900	2,733,459	-111,332	2,622,127	0	123,344	-15,112	2,429,645	19,650	2,557,527	
1986	0	143,785	-16,131	2,698,009	24,010	2,849,673	-32,901	2,816,772	0	122,819	-16,131	2,544,809	19,650	2,671,147	
1987	0	143,388	3,889	2,807,783	24,130	2,979,190	-36,565	2,942,625	0	122,444	3,889	2,652,283	19,650	2,798,266	
1988	0	143,651	23,689	2,916,347	24,250	3,107,937	232,849	3,340,786	0	122,729	23,689	2,758,447	19,650	2,924,515	
1989	0	143,973	-13,363	3,158,294	24,350	3,313,254	-2,278	3,310,976	0	123,075	-13,363	2,995,994	19,650	3,125,356	
1990	0	144,044	7,202	3,278,785	24,500	3,454,531	17,036	3,471,567	0	123,185	7,202	3,112,185	19,650	3,262,222	
1991	0	144,150	-8,305	3,348,504	24,500	3,508,849	51,123	3,559,972	0	123,320	-8,305	3,177,604	19,650	3,312,269	
1992	0	144,075	24,218	3,415,523	24,500	3,608,316	29,949	3,638,265	0	123,274	24,218	3,240,323	19,650	3,407,465	
1993	0	143,854	-27,739	3,480,842	24,500	3,621,457	11,972	3,633,429	0	123,096	-27,739	3,301,342	19,650	3,416,349	
1994	0	143,970	-11,345	3,545,261	24,500	3,702,386	23,807	3,726,193	0	123,174	-11,345	3,362,361	19,650	3,493,840	
1995	0	143,954	32,605	3,607,080	24,500	3,808,139	30,154	3,838,293	0	123,165	32,605	3,423,380	19,650	3,598,800	
1996	0	144,087	-15,814	3,641,891	24,500	3,794,664	46,344	3,841,008	0	123,307	-15,814	3,457,391	19,650	3,584,534	
1997	0	143,819	8,485	3,676,702	24,500	3,853,506	13,249	3,866,755	0	123,050	8,485	3,491,402	19,650	3,642,587	
1998	0	143,815	3,323	3,711,513	24,500	3,883,151	62,635	3,945,786	0	123,056	3,323	3,525,413	19,650	3,671,442	
1999	0	143,662	-13,750	3,746,324	24,500	3,900,736	1,602	3,902,338	0	122,913	-13,750	3,559,424	19,650	3,688,237	
2000	0	143,736	22,068	3,781,135	24,500	3,971,439	51,729	4,023,168	0	122,998	22,068	3,593,435	19,650	3,758,151	
2001	0	143,688	-6,116	3,807,087	24,500	3,969,159	13,543	3,982,702	0	122,896	-6,116	3,618,587	19,650	3,755,017	
2002	0	143,525	-32,821	3,829,639	24,500	3,964,843	50,937	4,015,780	0	122,742	-32,821	3,640,339	19,650	3,749,910	
2003	0	143,528	-942	3,852,191	24,500	4,019,277	51,714	4,070,991	0	122,754	-942	3,662,091	19,650	3,803,553	
2004	0	143,520	-8,364	3,874,743	25,500	4,035,399	34,366	4,069,765	0	122,755	-8,364	3,683,843	20,650	3,818,884	
2005	0	143,287	-1,714	3,897,300	24,500	4,063,373	28,817	4,092,190	0	122,531	-1,714	3,705,600	19,650	3,846,067	
2006	0	143,349	15,838	3,914,100	24,500	4,097,787	23,778	4,121,565	0	122,597	15,838	3,722,000	19,650	3,880,085	
2007	0	143,363	-1,363	3,930,900	24,500	4,097,400	38,221	4,135,621	0	122,615	-1,363	3,738,400	19,650	3,879,302	
2008	0	143,204	-7,745	3,947,700	24,500	4,107,659	48,753	4,156,412	0	122,460	-7,745	3,754,800	19,650	3,889,165	
2009	0	143,401	5,021	3,964,500	24,500	4,137,422	40,040	4,177,462	0	122,661	5,021	3,771,200	19,650	3,918,532	
2010	0	143,287	-7,491	3,981,300	24,500	4,141,596	34,585	4,176,181	0	122,551	-7,491	3,787,600	19,650	3,922,310	
2011	0	143,272	-3,981	3,997,140	24,500	4,160,931	37,785	4,198,716	0	122,528	-3,981	3,803,440	19,650	3,941,637	
2012	0	143,216	-10,981	4,012,980	24,500	4,169,715	28,472	4,198,187	0	122,472	-10,981	3,819,280	19,650	3,950,421	
2013	0	143,151	-6,168	4,028,820	24,500	4,190,303	42,612	4,232,915	0	122,407	-6,168	3,835,120	19,650	3,971,009	
2014	0	143,220	-9,450	4,044,660	24,500	4,202,930	41,242	4,244,172	0	122,476	-9,450	3,850,960	19,650	3,983,636	
2015	0	142,992	13,373	4,060,500	24,500	4,241,365	31,303	4,272,668	0	122,248	13,373	3,866,800	19,650	4,022,071	
2016	0	143,007	-6,223	4,060,900	24,500	4,222,184	48,291	4,270,475	0	122,263	-6,223	3,867,200	19,650	4,002,890	
2017	0	142,903	2,492	4,061,300	24,500	4,231,195	40,709	4,271,904	0	122,159	2,492	3,867,600	19,650	4,011,901	
2018	0	142,956	2,208	4,061,700	24,500	4,231,364	33,221	4,264,585	0	122,212	2,208	3,868,000	19,650	4,012,070	
2019	0	142,693	-101,332	4,062,100	24,500	4,127,961	149,968	4,277,929	0	121,949	-101,332	3,868,400	19,650	3,908,667	
2020(e)	0	142,553	0	4,063,200	24,500	4,230,253	40,323	4,270,576	0	121,809	0	3,869,500	19,650	4,010,959	

TABLE B-6: ANNUAL WATER QUANTITIES CONVEYED THRU EACH PUMPING

(in acre-feet)<sup>(b)</sup>

Sheet 3 of 8

Calendar Year	CALIFORNIA AQUEDUCT (Continued)											
	SOUTH SAN JOAQUIN DIVISION											
	BUENA VISTA PUMPING PLANT						WHEELER RIDGE PUMPING PLANT					
	Initial Fill Water	Operational Losses	Reservoir Storage Changes	Deliveries		Total	Initial Fill Water	Operational Losses	Reservoir Storage Changes	Deliveries		Total
				Water Supply	Recreation					Water Supply	Recreation	
	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)
1970	4,779	1,012	0	3	0	5,794	198	2	0	0	0	200
1971	7,853	8,399	0	101,512	0	117,764	7,533	-112	0	3,552	0	10,973
1972	100,274	20,044	-6,558	223,626	6,481	343,867	100,274	12,765	-6,558	84,955	6,481	197,917
1973	204,638	35,695	1,329	311,168	1,075	553,905	204,638	21,543	1,329	229,757	1,075	458,342
1974	246,620	19,674	-24,361	388,947	2,108	632,988	246,620	11,845	-24,361	336,196	2,108	572,408
1975	103,352	26,342	-693	672,998	3,358	805,357	103,352	19,763	-693	622,173	3,358	747,953
1976	77,354	83,475	16,631	801,281	5,300	984,041	77,354	71,675	16,631	780,134	5,300	951,094
1977	4,360	83,077	-35,852	982,061	5,755	1,039,401	4,360	71,277	-35,852	961,561	5,755	1,007,101
1978	4,360	83,255	16,492	1,020,830	6,230	1,131,167	4,360	71,455	16,492	998,430	6,230	1,096,967
1979	0	83,442	12,722	1,083,732	6,630	1,186,526	0	71,642	12,722	1,058,132	6,630	1,149,126
1980	0	82,964	-17,858	1,144,042	7,130	1,216,278	0	71,164	-17,858	1,112,542	7,130	1,172,978
1981	0	82,722	6,184	1,183,034	14,905	1,286,845	0	70,922	6,184	1,134,163	14,905	1,226,174
1982	0	83,027	-17,876	1,232,390	17,980	1,315,521	0	71,227	-17,876	1,171,890	17,980	1,243,221
1983	2	82,628	-27,434	1,328,571	17,980	1,401,747	2	70,828	-27,434	1,243,441	17,980	1,304,817
1984	0	82,433	32,886	1,440,677	17,980	1,573,976	0	70,633	32,886	1,343,107	17,980	1,464,606
1985	0	82,985	-15,112	1,552,980	17,980	1,638,833	0	71,185	-15,112	1,442,880	17,980	1,516,933
1986	0	82,460	-16,131	1,618,040	17,980	1,702,349	0	70,660	-16,131	1,495,040	17,980	1,567,549
1987	0	82,085	3,889	1,673,610	17,980	1,777,564	0	70,285	3,889	1,537,710	17,980	1,629,864
1988	0	82,370	23,689	1,731,170	17,980	1,855,209	0	70,570	23,689	1,582,470	17,980	1,694,709
1989	0	82,716	-13,363	1,929,813	17,980	2,017,146	0	70,916	-13,363	1,768,313	17,980	1,843,846
1990	0	82,826	7,202	1,999,800	17,980	2,107,808	0	71,026	7,202	1,825,500	17,980	1,921,708
1991	0	82,961	-8,305	2,062,700	17,980	2,155,336	0	71,161	-8,305	1,888,400	17,980	1,969,236
1992	0	82,915	24,218	2,124,400	17,980	2,249,513	0	71,115	24,218	1,950,100	17,980	2,063,413
1993	0	82,737	-27,739	2,184,400	17,980	2,257,378	0	70,937	-27,739	2,010,100	17,980	2,071,278
1994	0	82,815	-11,345	2,244,400	17,980	2,333,850	0	71,015	-11,345	2,070,100	17,980	2,147,750
1995	0	82,806	32,605	2,304,400	17,980	2,437,791	0	71,006	32,605	2,130,100	17,980	2,251,691
1996	0	82,948	-15,814	2,337,400	17,980	2,422,514	0	71,148	-15,814	2,163,100	17,980	2,236,414
1997	0	82,691	8,485	2,370,400	17,980	2,479,556	0	70,891	8,485	2,196,100	17,980	2,293,456
1998	0	82,697	3,323	2,403,400	17,980	2,507,400	0	70,897	3,323	2,229,100	17,980	2,321,300
1999	0	82,554	-13,750	2,436,400	17,980	2,523,184	0	70,754	-13,750	2,262,100	17,980	2,337,084
2000	0	82,639	22,068	2,469,400	17,980	2,592,087	0	70,839	22,068	2,295,100	17,980	2,405,987
2001	0	82,537	-6,116	2,493,260	17,980	2,587,661	0	70,737	-6,116	2,318,960	17,980	2,401,561
2002	0	82,383	-32,821	2,513,720	17,980	2,581,262	0	70,583	-32,821	2,339,420	17,980	2,395,162
2003	0	82,395	-942	2,534,180	17,980	2,633,613	0	70,595	-942	2,359,880	17,980	2,447,513
2004	0	82,396	-8,364	2,554,640	18,980	2,647,652	0	70,596	-8,364	2,380,340	18,980	2,461,552
2005	0	82,172	-1,714	2,575,100	17,980	2,673,538	0	70,372	-1,714	2,400,800	17,980	2,487,438
2006	0	82,238	15,838	2,591,500	17,980	2,707,556	0	70,438	15,838	2,417,200	17,980	2,521,456
2007	0	82,256	-1,363	2,607,900	17,980	2,706,773	0	70,456	-1,363	2,433,600	17,980	2,520,673
2008	0	82,101	-7,745	2,624,300	17,980	2,716,636	0	70,301	-7,745	2,450,000	17,980	2,530,536
2009	0	82,302	5,021	2,640,700	17,980	2,746,003	0	70,502	5,021	2,466,400	17,980	2,559,903
2010	0	82,192	-7,491	2,657,100	17,980	2,749,781	0	70,392	-7,491	2,482,800	17,980	2,563,681
2011	0	82,169	-3,981	2,672,940	17,980	2,769,108	0	70,369	-3,981	2,498,640	17,980	2,583,008
2012	0	82,113	-10,981	2,688,780	17,980	2,777,892	0	70,313	-10,981	2,514,480	17,980	2,591,792
2013	0	82,048	-6,168	2,704,620	17,980	2,798,480	0	70,248	-6,168	2,530,320	17,980	2,612,380
2014	0	82,117	-9,450	2,720,460	17,980	2,811,107	0	70,317	-9,450	2,546,160	17,980	2,625,007
2015	0	81,889	13,373	2,736,300	17,980	2,849,542	0	70,089	13,373	2,562,000	17,980	2,663,442
2016	0	81,904	-6,223	2,736,700	17,980	2,830,361	0	70,104	-6,223	2,562,400	17,980	2,644,261
2017	0	81,800	2,492	2,737,100	17,980	2,839,372	0	70,000	2,492	2,562,800	17,980	2,653,272
2018	0	81,853	2,208	2,737,500	17,980	2,839,541	0	70,053	2,208	2,563,200	17,980	2,653,441
2019	0	81,590	-101,332	2,737,900	17,980	2,736,138	0	69,790	-101,332	2,563,600	17,980	2,550,038
2020(e)	0	81,450	0	2,739,000	17,980	2,838,430	0	69,650	0	2,564,700	17,980	2,652,330

# AND POWER RECOVERY PLANT OF PROJECT TRANSPORTATION FACILITIES (a)

(in acre-feet)<sup>(b)</sup>

Sheet 4 of 8

Calendar Year	CALIFORNIA AQUEDUCT (Continued)											
	SOUTH SAN JOAQUIN DIVISION (Continued)						TEHACHAPI DIVISION					
	WIND GAP PUMPING PLANT						A. D. EDMONSTON (TEHACHAPI) PUMPING PLANT					
	Initial Fill Water	Operational Losses	Reservoir Storage Changes	Deliveries		Total	Initial Fill Water	Operational Losses	Reservoir Storage Changes	Deliveries		Total
				Water Supply	Recreation					Water Supply	Recreation	
	(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)	(51)
1971	7,366	-159	0	0	0	7,207	5,446	8	0	0	0	5,454
1972	100,274	13,160	-6,558	78,891	6,481	192,248	100,274	16,067	-6,558	74,123	6,481	190,387
1973	204,638	32,414	1,329	209,841	1,075	449,297	204,638	34,051	1,329	207,880	1,075	448,973
1974	246,620	17,657	-24,361	318,196	2,108	560,220	246,620	18,183	-24,361	313,632	2,108	556,182
1975	103,352	25,326	-693	586,753	3,358	718,096	103,352	20,183	-693	573,686	3,358	699,886
1976	77,354	70,875	16,631	735,234	5,300	905,394	77,354	68,275	16,631	719,372	5,100	886,732
1977	4,360	70,477	-35,852	912,061	5,755	956,801	4,360	67,877	-35,852	896,161	5,555	938,101
1978	4,360	70,655	16,492	948,930	6,230	1,046,667	4,360	68,055	16,492	922,130	6,030	1,017,067
1979	0	70,842	12,722	1,008,632	6,630	1,098,826	0	68,242	12,722	972,432	6,430	1,059,826
1980	0	70,364	-17,858	1,063,042	7,130	1,122,678	0	67,764	-17,858	1,019,142	6,930	1,075,978
1981	0	70,122	6,184	1,084,663	14,905	1,175,874	0	67,522	6,184	1,040,025	14,705	1,128,436
1982	0	70,427	-17,876	1,122,390	17,980	1,192,921	0	67,827	-17,876	1,077,190	17,780	1,144,921
1983	2	70,028	-27,434	1,192,741	17,980	1,253,317	2	67,428	-27,434	1,142,941	17,780	1,200,717
1984	0	69,833	32,886	1,291,807	17,980	1,412,506	0	67,233	32,886	1,239,107	17,780	1,357,006
1985	0	70,385	-15,112	1,390,980	17,980	1,464,233	0	67,785	-15,112	1,335,280	17,780	1,405,733
1986	0	69,860	-16,131	1,442,540	17,980	1,514,249	0	67,260	-16,131	1,384,040	17,780	1,452,949
1987	0	69,485	3,889	1,484,610	17,980	1,575,964	0	66,885	3,889	1,423,210	17,780	1,511,764
1988	0	69,770	23,689	1,528,770	17,980	1,640,209	0	67,170	23,689	1,464,270	17,780	1,572,909
1989	0	70,116	-13,363	1,714,013	17,980	1,788,746	0	67,516	-13,363	1,646,713	17,780	1,718,646
1990	0	70,226	7,202	1,770,500	17,980	1,865,908	0	67,626	7,202	1,700,300	17,780	1,792,908
1991	0	70,361	-8,305	1,833,400	17,980	1,913,436	0	67,761	-8,305	1,763,200	17,780	1,840,436
1992	0	70,315	24,218	1,895,100	17,980	2,007,613	0	67,715	24,218	1,824,900	17,780	1,934,613
1993	0	70,137	-27,739	1,955,100	17,980	2,015,478	0	67,537	-27,739	1,884,900	17,780	1,942,478
1994	0	70,215	-11,345	2,015,100	17,980	2,091,950	0	67,615	-11,345	1,944,900	17,780	2,018,950
1995	0	70,206	32,605	2,075,100	17,980	2,195,891	0	67,606	32,605	2,004,900	17,780	2,122,891
1996	0	70,348	-15,814	2,108,100	17,980	2,180,614	0	67,748	-15,814	2,037,900	17,780	2,107,614
1997	0	70,091	8,485	2,141,100	17,980	2,237,656	0	67,491	8,485	2,070,900	17,780	2,164,656
1998	0	70,097	3,323	2,174,100	17,980	2,265,500	0	67,497	3,323	2,103,900	17,780	2,192,500
1999	0	69,954	-13,750	2,207,100	17,980	2,281,284	0	67,354	-13,750	2,136,900	17,780	2,208,284
2000	0	70,039	22,068	2,240,100	17,980	2,350,187	0	67,439	22,068	2,169,900	17,780	2,277,187
2001	0	69,937	-6,116	2,263,960	17,980	2,345,761	0	67,337	-6,116	2,193,760	17,780	2,272,761
2002	0	69,783	-32,821	2,284,420	17,980	2,339,362	0	67,183	-32,821	2,214,220	17,780	2,266,362
2003	0	69,795	-942	2,304,880	17,980	2,391,713	0	67,195	-942	2,234,680	17,780	2,318,713
2004	0	69,796	-8,364	2,325,340	18,980	2,405,752	0	67,196	-8,364	2,255,140	18,780	2,332,752
2005	0	69,572	-1,714	2,345,800	17,980	2,431,638	0	66,972	-1,714	2,275,600	17,780	2,358,638
2006	0	69,638	15,838	2,362,200	17,980	2,465,656	0	67,038	15,838	2,292,000	17,780	2,392,656
2007	0	69,656	-1,363	2,378,600	17,980	2,464,873	0	67,056	-1,363	2,308,400	17,780	2,391,873
2008	0	69,501	-7,745	2,395,000	17,980	2,474,736	0	66,901	-7,745	2,324,800	17,780	2,401,736
2009	0	69,702	5,021	2,411,400	17,980	2,504,103	0	67,102	5,021	2,341,200	17,780	2,431,103
2010	0	69,592	-7,491	2,427,800	17,980	2,507,881	0	66,992	-7,491	2,357,600	17,780	2,434,881
2011	0	69,569	-3,981	2,443,640	17,980	2,527,208	0	66,969	-3,981	2,373,440	17,780	2,454,208
2012	0	69,513	-10,981	2,459,480	17,980	2,535,992	0	66,913	-10,981	2,389,280	17,780	2,462,992
2013	0	69,448	-6,168	2,475,320	17,980	2,556,580	0	66,848	-6,168	2,405,120	17,780	2,483,580
2014	0	69,517	-9,450	2,491,160	17,980	2,569,207	0	66,917	-9,450	2,420,960	17,780	2,496,207
2015	0	69,289	13,373	2,507,000	17,980	2,607,642	0	66,689	13,373	2,436,800	17,780	2,534,642
2016	0	69,304	-6,223	2,507,400	17,980	2,588,461	0	66,704	-6,223	2,437,200	17,780	2,515,461
2017	0	69,200	2,492	2,507,800	17,980	2,597,472	0	66,600	2,492	2,437,600	17,780	2,524,472
2018	0	69,253	2,208	2,508,200	17,980	2,597,641	0	66,653	2,208	2,438,000	17,780	2,524,641
2019	0	68,990	-101,332	2,508,600	17,980	2,494,238	0	66,390	-101,332	2,438,400	17,780	2,421,238
2020(e)	0	68,850	0	2,509,700	17,980	2,596,530	0	66,250	0	2,439,500	17,780	2,523,530

TABLE B-6: ANNUAL WATER QUANTITIES CONVEYED THRU EACH PUMPING

(in acre-feet)<sup>(b)</sup>

Sheet 5 of 8

Calendar Year	CALIFORNIA AQUEDUCT (Continued)											
	MOJAVE DIVISION											
	COTTONWOOD POWERPLANT						PEARBLOSSOM PUMPING PLANT					
	Initial Fill Water	Opera- tional Losses	Reservoir Storage Changes	Deliveries		Total	Initial Fill Water	Opera- tional Losses	Reservoir Storage Changes	Deliveries		Total
				Water Supply	Recre- ation					Water Supply	Recre- ation	
(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(60)	(61)	(62)	(63)	
1971	0	0	0	0	0	0	21	0	0	0	21	
1972	0	0	0	0	0	0	35,243	5,282	-153	1,794	0	42,166
1973	0	0	0	0	0	0	80,177	21,522	-2,700	52,273	0	151,272
1974	0	0	0	0	0	0	76,694	10,849	-11,149	102,837	44	179,275
1975	0	0	0	0	0	0	10,000	2,364	-8,397	190,818	70	194,855
1976	0	0	0	0	0	0	18,883	29,424	13,967	297,622	1,700	361,596
1977	0	0	0	0	0	0	0	29,009	-19,304	648,131	1,900	659,736
1978	0	0	0	0	0	0	0	29,054	2,025	662,710	2,150	695,939
1979	0	0	0	0	0	0	0	29,085	16,826	703,492	2,430	751,833
1980	0	0	0	0	0	0	0	28,932	-19,792	733,992	2,430	745,562
1981	0	42,433	11,731	820,300	10,080	884,544	0	28,533	11,731	742,655	5,130	788,049
1982	0	42,787	-22,546	835,665	12,780	868,686	0	28,887	-22,546	750,210	7,830	764,381
1983	2	42,316	-20,966	823,021	12,780	857,153	2	28,416	-20,966	756,983	7,830	772,265
1984	0	42,138	25,026	838,880	12,780	918,824	0	28,238	25,026	764,568	7,830	825,662
1985	0	42,739	-13,582	854,735	12,780	896,672	0	28,839	-13,582	772,150	7,830	795,237
1986	0	42,198	-4,303	866,525	12,780	917,200	0	28,298	-4,303	779,700	7,830	811,525
1987	0	41,705	-6,635	878,725	12,780	926,575	0	27,805	-6,635	787,650	7,830	816,650
1988	0	42,008	22,440	890,805	12,780	968,033	0	28,108	22,440	795,600	7,830	853,978
1989	0	42,456	-20,834	903,278	12,780	937,680	0	28,556	-20,834	803,823	7,830	819,375
1990	0	42,594	28,710	915,895	12,780	999,979	0	28,694	28,710	812,200	7,830	877,434
1991	0	42,660	-10,097	922,785	12,780	968,128	0	28,760	-10,097	813,560	7,830	840,053
1992	0	42,615	4,345	928,475	12,780	988,215	0	28,715	4,345	813,820	7,830	854,710
1993	0	42,514	-13,253	932,455	12,780	974,496	0	28,614	-13,253	814,080	7,830	837,271
1994	0	42,659	1,722	936,145	12,780	993,306	0	28,759	1,722	814,340	7,830	852,651
1995	0	42,591	16,354	940,435	12,780	1,012,160	0	28,691	16,354	814,600	7,830	867,475
1996	0	42,696	-786	945,415	12,780	1,000,105	0	28,796	-786	814,860	7,830	850,700
1997	0	42,671	-3,173	950,405	12,780	1,002,683	0	28,771	-3,173	815,120	7,830	848,548
1998	0	42,492	313	955,395	12,780	1,010,980	0	28,592	313	815,380	7,830	852,115
1999	0	42,464	-2,650	960,385	12,780	1,012,979	0	28,564	-2,650	815,640	7,830	849,384
2000	0	42,592	3,059	965,375	12,780	1,023,806	0	28,692	3,059	815,900	7,830	855,481
2001	0	42,499	3,265	968,780	12,780	1,027,324	0	28,599	3,265	816,180	7,830	855,874
2002	0	42,371	-20,418	969,060	12,780	1,003,793	0	28,471	-20,418	816,460	7,830	832,343
2003	0	42,308	-439	969,340	12,780	1,023,989	0	28,408	-439	816,740	7,830	852,539
2004	0	42,297	-1,705	969,620	13,780	1,023,992	0	28,397	-1,705	817,020	8,830	852,542
2005	0	42,209	-1,714	969,900	12,780	1,023,175	0	28,309	-1,714	817,300	7,830	851,725
2006	0	42,193	5,866	970,200	12,780	1,031,039	0	28,293	5,866	817,600	7,830	859,589
2007	0	42,217	-3,427	970,500	12,780	1,022,070	0	28,317	-3,427	817,900	7,830	850,620
2008	0	42,275	2,967	970,800	12,780	1,028,822	0	28,375	2,967	818,200	7,830	857,372
2009	0	42,419	-6,655	971,100	12,780	1,019,644	0	28,519	-6,655	818,500	7,830	848,194
2010	0	42,296	3,595	971,400	12,780	1,030,071	0	28,396	3,595	818,800	7,830	858,621
2011	0	42,221	-1,885	971,700	12,780	1,024,816	0	28,321	-1,885	819,100	7,830	853,366
2012	0	42,196	-18	972,000	12,780	1,026,958	0	28,296	-18	819,400	7,830	855,508
2013	0	42,225	-18	972,300	12,780	1,027,287	0	28,325	-18	819,700	7,830	855,837
2014	0	42,355	-18	972,600	12,780	1,027,717	0	28,455	-18	820,000	7,830	856,267
2015	0	42,234	-421	972,900	12,780	1,027,493	0	28,334	-421	820,300	7,830	856,043
2016	0	42,235	-1,234	973,300	12,780	1,027,081	0	28,335	-1,234	820,700	7,830	855,631
2017	0	42,144	-633	973,700	12,780	1,027,991	0	28,244	-633	821,100	7,830	856,541
2018	0	42,135	-4,253	974,100	12,780	1,024,762	0	28,235	-4,253	821,500	7,830	853,312
2019	0	42,048	-13,788	974,500	12,780	1,015,540	0	28,148	-13,788	821,900	7,830	844,090
2020(e)	0	41,991	0	975,600	12,780	1,030,371	0	28,091	0	823,000	7,830	858,921



# AND POWER RECOVERY PLANT OF PROJECT TRANSPORTATION FACILITIES (a)

(in acre-feet)<sup>(b)</sup>

Sheet 6 of 8

Calen- dar Year	CALIFORNIA AQUEDUCT (Continued)											
	SANTA ANA DIVISION						WEST BRANCH, CALIFORNIA AQUEDUCT					
	DEVIL CANYON POWERPLANT						OSO PUMPING PLANT					
	Initial Fill Water	Opera- tional Losses	Reservoir Storage Changes	Deliveries		Total	Initial Fill Water	Opera- tional Losses	Reservoir Storage Changes	Deliveries		Total
				Water Supply	Recre- ation					Water Supply	Recre- ation	
	(64)	(65)	(66)	(67)	(68)	(69)	(70)	(71)	(72)	(73)	(74)	(75)
1971	0	0	0	0	0	0	2,444	133	0	0	0	2,577
1972	37	0	0	1,275	0	1,312	63,883	6,557	-6,405	71,991	6,481	142,507
1973	40,848	14,745	0	51,812	0	107,405	124,461	16,995	4,029	155,317	1,075	301,877
1974	74,666	8,369	-4,925	102,196	0	180,306	169,926	12,702	-13,212	209,172	2,064	380,652
1975	10,000	1,995	-6,719	189,993	0	195,269	93,352	23,008	7,704	374,306	3,288	501,658
1976	18,883	13,391	8,938	296,690	600	338,502	58,471	24,796	2,664	386,525	3,400	475,856
1977	0	13,322	-11,431	646,900	800	649,591	4,360	24,813	-16,548	196,225	3,530	212,380
1978	0	13,274	4,467	661,200	1,000	679,941	4,360	24,946	14,467	199,725	3,630	247,128
1979	0	13,196	6,511	686,700	1,250	707,657	0	25,102	-4,104	202,825	3,750	227,573
1980	0	13,071	-10,961	704,700	1,250	708,060	0	24,777	1,934	212,225	4,250	243,186
1981	0	12,784	11,409	710,650	3,625	738,468	0	24,934	-5,547	217,925	4,625	241,937
1982	0	13,012	-15,868	715,200	6,000	718,344	0	24,885	4,670	239,525	5,000	274,080
1983	2	12,798	-21,127	720,213	6,000	717,886	0	24,957	-6,468	317,920	5,000	341,409
1984	0	12,460	15,962	724,508	6,000	758,930	0	24,940	7,860	398,227	5,000	436,027
1985	0	12,863	-7,559	728,800	6,000	740,104	0	24,891	-1,530	478,545	5,000	506,906
1986	0	12,479	-13,825	733,660	6,000	738,314	0	24,907	-11,828	515,515	5,000	533,594
1987	0	12,002	-2,924	739,020	6,000	754,098	0	25,025	10,524	542,485	5,000	583,034
1988	0	12,283	18,804	744,380	6,000	781,467	0	25,007	1,249	571,465	5,000	602,721
1989	0	12,685	-9,620	749,813	6,000	758,878	0	24,905	7,471	741,435	5,000	778,811
1990	0	12,861	14,954	755,600	6,000	789,415	0	24,877	-21,508	782,405	5,000	790,774
1991	0	12,917	-2,465	756,960	6,000	773,412	0	24,946	1,792	838,415	5,000	870,153
1992	0	12,913	1,607	757,220	6,000	777,740	0	24,945	19,873	894,425	5,000	944,243
1993	0	12,877	-4,817	757,480	6,000	771,540	0	24,868	-14,486	950,445	5,000	965,827
1994	0	12,897	-1,335	757,740	6,000	775,302	0	24,801	-13,067	1,006,755	5,000	1,023,489
1995	0	12,882	8,761	758,000	6,000	785,643	0	24,860	16,251	1,062,465	5,000	1,108,576
1996	0	12,952	-250	758,260	6,000	776,962	0	24,897	-15,028	1,090,485	5,000	1,105,354
1997	0	12,926	-6,031	758,520	6,000	771,415	0	24,665	11,658	1,118,495	5,000	1,159,818
1998	0	12,880	5,520	758,780	6,000	783,180	0	24,850	3,010	1,146,505	5,000	1,179,365
1999	0	12,882	-263	759,040	6,000	777,659	0	24,735	-11,100	1,174,515	5,000	1,193,150
2000	0	12,908	-260	759,300	6,000	777,948	0	24,692	19,009	1,202,525	5,000	1,251,226
2001	0	12,860	-1,368	759,580	6,000	777,072	0	24,683	-9,381	1,222,980	5,000	1,243,282
2002	0	12,734	-8,258	759,860	6,000	770,336	0	24,657	-12,403	1,243,160	5,000	1,260,414
2003	0	12,693	-247	760,140	6,000	778,586	0	24,732	-503	1,263,340	5,000	1,292,569
2004	0	12,745	-992	760,420	6,000	778,173	0	24,744	-6,659	1,283,520	5,000	1,306,605
2005	0	12,618	-997	760,700	6,000	778,321	0	24,608	0	1,303,700	5,000	1,333,308
2006	0	12,649	0	761,000	6,000	779,649	0	24,690	9,972	1,319,800	5,000	1,359,462
2007	0	12,642	0	761,300	6,000	779,942	0	24,684	2,064	1,335,900	5,000	1,367,648
2008	0	12,685	0	761,600	6,000	780,285	0	24,471	-10,712	1,352,000	5,000	1,370,759
2009	0	12,753	0	761,900	6,000	780,653	0	24,528	11,676	1,368,100	5,000	1,409,304
2010	0	12,631	-1	762,200	6,000	780,830	0	24,541	-11,086	1,384,200	5,000	1,402,655
2011	0	12,647	0	701,300	6,000	719,947	0	24,593	-2,096	1,399,740	5,000	1,427,237
2012	0	12,614	0	701,600	6,000	720,214	0	24,562	-10,963	1,415,280	5,000	1,433,879
2013	0	12,652	0	701,900	6,000	720,552	0	24,468	-6,150	1,430,820	5,000	1,454,138
2014	0	12,717	0	702,200	6,000	720,917	0	24,407	-9,432	1,446,360	5,000	1,466,335
2015	0	12,634	2	702,500	6,000	721,136	0	24,300	13,794	1,461,900	5,000	1,504,994
2016	0	12,674	0	702,900	6,000	721,574	0	24,314	-4,989	1,461,900	5,000	1,486,225
2017	0	12,590	-509	703,300	6,000	721,381	0	24,301	3,125	1,461,900	5,000	1,494,326
2018	0	12,543	-4,377	703,700	6,000	717,866	0	24,363	6,461	1,461,900	5,000	1,497,724
2019	0	12,512	-235	704,100	6,000	722,377	0	24,187	-87,544	1,461,900	5,000	1,403,543
2020(e)	0	12,495	0	705,200	6,000	723,695	0	24,104	0	1,461,900	5,000	1,491,004

TABLE B-6: ANNUAL WATER QUANTITIES CONVEYED THRU EACH PUMPING

(in acre-feet)<sup>(b)</sup>

Sheet 7 of 8

Calen- dar Year.	CALIFORNIA AQUEDUCT (Continued)											
	WEST BRANCH, CALIFORNIA AQUEDUCT (Continued)											
	PYRAMID POWERPLANT						CASTAIC POWERPLANT					
	Initial Fill Water	Opera- tional Losses	Reservoir Storage Changes	Deliveries		Total	Initial Fill Water	Opera- tional Losses	Reservoir Storage Changes	Deliveries		Total
				Water Supply	Recre- ation					Water Supply	Recre- ation	
(76)	(77)	(78)	(79)	(80)	(81)	(82)	(83)	(84)	(85)	(86)	(87)	
1972	0	0	0	0	0	0	57,364	1,788	-6,162	71,938	6,481	131,409
1973	0	0	0	0	0	0	37,198	6,430	4,542	155,297	1,075	204,542
1974	0	0	0	0	0	0	82,364	1,772	510	209,136	541	294,323
1975	0	0	0	0	0	0	90,460	5,002	49,630	374,280	1,563	520,935
1976	0	0	0	0	0	0	57,507	12,827	2,664	386,500	1,500	460,998
1977	0	0	0	0	0	0	4,360	12,844	-16,548	196,200	1,630	198,486
1978	0	0	0	0	0	0	4,360	12,977	14,467	199,700	1,630	233,134
1979	0	0	0	0	0	0	0	13,133	-4,104	202,800	1,630	213,459
1980	0	0	0	0	0	0	0	12,808	1,934	212,200	1,630	228,572
1981	0	21,934	-5,547	217,800	4,625	238,812	0	12,965	-5,547	217,800	1,815	227,033
1982	0	21,885	4,670	239,300	5,000	270,855	0	12,916	4,670	239,300	2,000	258,886
1983	0	21,957	-6,468	317,425	5,000	337,914	0	12,988	-6,468	317,425	2,000	325,945
1984	0	21,940	7,860	397,462	5,000	432,262	0	12,971	7,860	397,462	2,000	420,293
1985	0	21,891	-1,530	477,500	5,000	502,861	0	12,922	-1,530	477,500	2,000	490,892
1986	0	21,907	-11,828	514,200	5,000	529,279	0	12,938	-11,828	514,200	2,000	517,310
1987	0	22,025	10,524	540,900	5,000	578,449	0	13,056	10,524	540,900	2,000	566,480
1988	0	22,007	1,249	569,600	5,000	597,856	0	13,038	1,249	569,600	2,000	585,887
1989	0	21,905	7,471	739,300	5,000	773,676	0	12,936	7,471	739,300	2,000	761,707
1990	0	21,877	-21,508	780,000	5,000	785,369	0	12,908	-21,508	780,000	2,000	773,400
1991	0	21,946	1,792	835,740	5,000	864,478	0	12,977	1,792	835,740	2,000	852,509
1992	0	21,945	19,873	891,480	5,000	938,298	0	12,976	19,873	891,480	2,000	926,329
1993	0	21,868	-14,486	947,220	5,000	959,602	0	12,899	-14,486	947,220	2,000	947,633
1994	0	21,801	-13,067	1,002,960	5,000	1,016,694	0	12,832	-13,067	1,002,960	2,000	1,004,725
1995	0	21,860	16,251	1,058,700	5,000	1,101,811	0	12,891	16,251	1,058,700	2,000	1,089,842
1996	0	21,897	-15,028	1,086,440	5,000	1,098,309	0	12,928	-15,028	1,086,440	2,000	1,086,340
1997	0	21,665	11,658	1,114,180	5,000	1,152,503	0	12,696	11,658	1,114,180	2,000	1,140,534
1998	0	21,850	3,010	1,141,920	5,000	1,171,780	0	12,881	3,010	1,141,920	2,000	1,159,811
1999	0	21,735	-11,100	1,169,660	5,000	1,185,295	0	12,766	-11,100	1,169,660	2,000	1,173,326
2000	0	21,692	19,009	1,197,400	5,000	1,243,101	0	12,723	19,009	1,197,400	2,000	1,231,132
2001	0	21,683	-9,381	1,217,580	5,000	1,234,882	0	12,714	-9,381	1,217,580	2,000	1,222,913
2002	0	21,657	-12,403	1,237,760	5,000	1,252,014	0	12,688	-12,403	1,237,760	2,000	1,240,045
2003	0	21,732	-503	1,257,940	5,000	1,284,169	0	12,763	-503	1,257,940	2,000	1,272,200
2004	0	21,744	-6,659	1,278,120	5,000	1,298,205	0	12,775	-6,659	1,278,120	2,000	1,286,236
2005	0	21,608	0	1,298,300	5,000	1,324,908	0	12,639	0	1,298,300	2,000	1,312,939
2006	0	21,690	9,972	1,314,400	5,000	1,351,062	0	12,721	9,972	1,314,400	2,000	1,339,093
2007	0	21,684	2,064	1,330,500	5,000	1,359,248	0	12,715	2,064	1,330,500	2,000	1,347,279
2008	0	21,471	-10,712	1,346,600	5,000	1,362,359	0	12,502	-10,712	1,346,600	2,000	1,350,390
2009	0	21,528	11,676	1,362,700	5,000	1,400,904	0	12,559	11,676	1,362,700	2,000	1,388,935
2010	0	21,541	-11,086	1,378,800	5,000	1,394,255	0	12,572	-11,086	1,378,800	2,000	1,382,286
2011	0	21,593	-2,096	1,394,340	5,000	1,418,837	0	12,624	-2,096	1,394,340	2,000	1,406,868
2012	0	21,562	-10,963	1,409,880	5,000	1,425,479	0	12,593	-10,963	1,409,880	2,000	1,413,510
2013	0	21,468	-6,150	1,425,420	5,000	1,445,738	0	12,499	-6,150	1,425,420	2,000	1,433,769
2014	0	21,407	-9,432	1,440,960	5,000	1,457,935	0	12,438	-9,432	1,440,960	2,000	1,445,966
2015	0	21,300	13,794	1,456,500	5,000	1,496,594	0	12,331	13,794	1,456,500	2,000	1,484,625
2016	0	21,314	-4,989	1,456,500	5,000	1,477,825	0	12,345	-4,989	1,456,500	2,000	1,465,856
2017	0	21,301	3,125	1,456,500	5,000	1,485,926	0	12,332	3,125	1,456,500	2,000	1,473,957
2018	0	21,363	6,461	1,456,500	5,000	1,489,324	0	12,394	6,461	1,456,500	2,000	1,477,355
2019	0	21,187	-87,544	1,456,500	5,000	1,395,143	0	12,218	-87,544	1,456,500	2,000	1,383,174
2020(e)	0	21,104	0	1,456,500	5,000	1,482,604	0	12,135	0	1,456,500	2,000	1,470,635

# AND POWER RECOVERY PLANT OF PROJECT TRANSPORTATION FACILITIES (a)

(in acre-feet)<sup>(b)</sup>

Sheet 8 of 8

Calendar Year	CALIFORNIA AQUEDUCT (Continued)						
	COASTAL BRANCH, CALIFORNIA AQUEDUCT						
	LAS PERILLAS AND BADGER HILL PUMPING PLANTS				DEVIL'S DEN, SAWTOOTH AND POLONIO PUMPING PLANTS AND SAN LUIS OBISPO POWERPLANT		
	Initial Fill Water	Opera- tional Losses	Water Supply Delivery	Total	Opera- tional Losses	Water Supply Delivery	Total
	(88)	(89)	(90)	(91)	(92)	(93)	(94)
1968	210	873	79,039	80,122	0	0	0
1969	0	1,042	62,064	63,106	0	0	0
1970	0	638	83,649	84,287	0	0	0
1971	0	3,455	110,971	114,426	0	0	0
1972	0	1,745	121,755	123,500	0	0	0
1973	0	5,479	78,645	84,124	0	0	0
1974	0	7,344	78,174	85,518	0	0	0
1975	0	5,819	85,216	91,035	0	0	0
1976	0	1,500	90,565	92,065	0	0	0
1977	0	1,500	97,500	99,000	0	0	0
1978	0	1,500	104,500	106,000	0	0	0
1979	0	1,500	110,900	112,400	0	0	0
1980	0	1,500	117,200	118,700	0	0	0
1981	0	1,500	124,100	125,600	0	0	0
1982	0	3,700	130,900	134,600	2,200	1,000	3,200
1983	0	3,700	116,100	119,800	2,200	9,900	12,100
1984	0	3,700	123,800	127,500	2,200	14,900	17,100
1985	0	3,700	133,665	137,365	2,200	22,165	24,365
1986	0	3,700	142,769	146,469	2,200	28,669	30,869
1987	0	3,700	151,773	155,473	2,200	35,073	37,273
1988	0	3,700	162,077	165,777	2,200	42,777	44,977
1989	0	3,700	175,681	179,381	2,200	53,781	55,981
1990	0	3,700	189,235	192,935	2,200	64,585	66,785
1991	0	3,700	191,754	195,454	2,200	67,104	69,304
1992	0	3,700	192,773	196,473	2,200	68,123	70,323
1993	0	3,700	193,792	197,492	2,200	69,142	71,342
1994	0	3,700	194,811	198,511	2,200	70,161	72,361
1995	0	3,700	195,830	199,530	2,200	71,180	73,380
1996	0	3,700	196,841	200,541	2,200	72,191	74,391
1997	0	3,700	197,852	201,552	2,200	73,202	75,402
1998	0	3,700	198,863	202,563	2,200	74,213	76,413
1999	0	3,700	199,874	203,574	2,200	75,224	77,424
2000	0	3,700	200,885	204,585	2,200	76,235	78,435
2001	0	3,700	202,177	205,877	2,200	77,527	79,727
2002	0	3,700	203,469	207,169	2,200	78,819	81,019
2003	0	3,700	204,761	208,461	2,200	80,111	82,311
2004	0	3,700	206,053	209,753	2,200	81,403	83,603
2005	0	3,700	207,350	211,050	2,200	82,700	84,900
2006	0	3,700	207,350	211,050	2,200	82,700	84,900
2007	0	3,700	207,350	211,050	2,200	82,700	84,900
2008	0	3,700	207,350	211,050	2,200	82,700	84,900
2009	0	3,700	207,350	211,050	2,200	82,700	84,900
2010	0	3,700	207,350	211,050	2,200	82,700	84,900
2011	0	3,700	207,350	211,050	2,200	82,700	84,900
2012	0	3,700	207,350	211,050	2,200	82,700	84,900
2013	0	3,700	207,350	211,050	2,200	82,700	84,900
2014	0	3,700	207,350	211,050	2,200	82,700	84,900
2015	0	3,700	207,350	211,050	2,200	82,700	84,900
2016	0	3,700	207,350	211,050	2,200	82,700	84,900
2017	0	3,700	207,350	211,050	2,200	82,700	84,900
2018	0	3,700	207,350	211,050	2,200	82,700	84,900
2019	0	3,700	207,350	211,050	2,200	82,700	84,900
2020(e)	0	3,700	207,350	211,050	2,200	82,700	84,900

**TABLE B-7: RECONCILIATION OF CAPITAL COSTS ALLOCATED TO WATER SUPPLY  
AND POWER GENERATION FOR THE PERIOD, 1952-1999**

(in thousands of dollars)

Project Facility	Project costs Allocated to Water Supply and Power Generation							Project Costs Allocated to Other Purposes	Total, State Water Project
	Misc. Income Credited to Construction (a)	Allowances for Future Price Escalation (b)	Costs of Construction of Water Delivery Structures (c)	Additional Costs of Requested Excess Capacity and Future Enlargement (d)	Capital Cost Component of Delta Water Charge (e)	Capital Cost Component of Transportation Water Charge (f)	Water Supply and Power Total (g)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>CONSERVATION FACILITIES</b>									
Upper Feather Division									
Frenchman Dam and Lake	173	0	0	0	525	0	698	2,602	3,300
Grizzly Valley Dam and Lake Davis	29	0	0	0	215	0	244	4,752	4,996
Antelope Dam and Lake	0	0	0	0	0	0	0	4,987	4,987
Abbey Bridge Dam and Res.	0	0	0	0	0	0	0	517	517
Dixie Refuge Dam and Res.	0	0	0	0	0	0	0	235	235
<b>Total, Upper Feather Division</b>	<b>202</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>740</b>	<b>0</b>	<b>942</b>	<b>13,093</b>	<b>14,035</b>
Oroville Division									
Multipurpose Facilities	3,157	128	149	0	316,905	0	320,339	80,094	400,433
Specific Power Facilities	0	76	0	0	108,877	0	108,953	0	108,953
<b>Total, Oroville Division</b>	<b>3,157</b>	<b>204</b>	<b>149</b>	<b>0</b>	<b>425,782</b>	<b>0</b>	<b>429,292</b>	<b>80,094</b>	<b>509,386</b>
California Aqueduct									
North San Joaquin Division	226	816	0	0	52,625	0	53,667	2,127	55,794
San Luis Division	377	7	0	0	83,021	0	83,405	3,843	87,248
<b>Total, California Aqueduct</b>	<b>603</b>	<b>823</b>	<b>0</b>	<b>0</b>	<b>135,646</b>	<b>0</b>	<b>137,072</b>	<b>5,970</b>	<b>143,042</b>
Delta Facilities	61	52,035	0	0	229,004	0	281,100	342,604	623,704
Additional Conservation Fac.	0	1,405,554	0	0	1,092,180	0	2,497,734	2,494	2,500,228
<b>TOTAL, CONSERVATION FACILITIES</b>	<b>4,023</b>	<b>1,458,616</b>	<b>149</b>	<b>0</b>	<b>1,883,352</b>	<b>0</b>	<b>3,346,140</b>	<b>444,255</b>	<b>3,790,395</b>
<b>TRANSPORTATION FACILITIES</b>									
Upper Feather Division									
Grizzly Valley Pipeline	0	0	0	0	0	340	340	0	340
North Bay Aqueduct	18	5,122	40	0	0	25,835	31,015	0	31,015
South Bay Aqueduct	1,615	0	308	0	0	47,124	49,047	20,637	69,684
California Aqueduct									
North San Joaquin Division	383	1,824	18	0	0	117,846	120,071	4,117	124,188
San Luis Division	97	7,090	0	0	0	106,478	113,665	3,986	117,651
South San Joaquin Division	300	312	3,044	3,244	0	250,801	257,701	8,003	265,704
Tehachapi Division	23	8,757	9	6,991	0	281,370	297,150	9,181	306,331
Mojave Division	693	11,841	417	0	0	242,595	255,546	8,318	263,864
Santa Ana Division	352	72	2,905	1,127	0	163,321	177,777	10,377	188,154
West Branch	37,528	11,242	3,021	106	0	412,005	463,902	17,293	481,195
Coastal Division	9	21,828	87	0	0	113,652	135,576	105	135,681
<b>Total, California Aqueduct</b>	<b>39,385</b>	<b>62,966</b>	<b>9,501</b>	<b>21,468</b>	<b>0</b>	<b>1,688,068</b>	<b>1,821,388</b>	<b>61,380</b>	<b>1,882,768</b>
<b>TOTAL, TRANSPORTATION FACILITIES</b>	<b>41,018</b>	<b>68,088</b>	<b>9,849</b>	<b>21,468</b>	<b>0</b>	<b>1,761,367</b>	<b>1,901,790</b>	<b>82,017</b>	<b>1,983,807</b>
<b>SAN JOAQUIN DRAINAGE FACILITIES</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12,039</b>	<b>12,039</b>
<b>UNASSIGNED AND DAVIS-GRUNSKY</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>141,401</b>	<b>141,401</b>
<b>TOTAL</b>	<b>45,041</b>	<b>1,526,704</b>	<b>9,998</b>	<b>21,468</b>	<b>1,883,352</b>	<b>1,761,367</b>	<b>5,247,930</b>	<b>679,712</b>	<b>5,927,642</b>

a) Miscellaneous project receipts, including those from sale of Airport Reservoir land, that are applied for accounting purposes to reduce the capital costs of the particular facilities.

b) These allowances are included for planning the future financial program, but not for determining current water charges. The costs shown on this appendix are based on prices prevailing on December 31, 1975.

c) See Table B-8.

d) From Table B-9, less a portion allocated to recreation and fish and wildlife enhancement.

e) See Table B-13. A portion of these costs will be offset by power generation sales and credits.

f) See Table B-10.

**TABLE B-8: CAPITAL COSTS OF REQUESTED DELIVERY STRUCTURES  
TO BE BUILT BY THE STATE (a)**

(in dollars)

Project Area and Water Supply Contractor	Calendar Year											Total
	1952-75	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<b>FEATHER RIVER AREA</b>												
County of Butte Thermalito Irrigation District <sup>(b)</sup>	104,924	0	0	0	0	0	0	0	0	0	0	104,924
	<u>43,939</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>43,939</u>
Subtotal	148,863	0	0	0	0	0	0	0	0	0	0	148,863
<b>NORTH BAY AREA</b>												
Napa County Flood Control and Water Conservation District	2,878	6,000	0	0	0	0	0	0	0	0	0	8,878
Solano County Flood Control and Water Conservation District	<u>0</u>	<u>0</u>	<u>0</u>	<u>30,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,000</u>	<u>0</u>	<u>31,000</u>
Subtotal	2,878	6,000	0	30,000	0	0	0	0	0	1,000	0	39,878
<b>SOUTH BAY AREA</b>												
Alameda County Flood Control and Water Conservation District, Zone 7	151,002	500	0	0	0	0	0	0	0	0	0	151,502
Alameda County Water District	143,599	500	0	0	0	0	0	0	0	0	0	144,099
Santa Clara Valley Water District	<u>12,780</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>12,780</u>
Subtotal	307,381	1,000	0	0	0	0	0	0	0	0	0	308,381
<b>SAN JOAQUIN VALLEY</b>												
Devil's Den Water District	75,841	0	0	0	0	0	0	0	0	0	0	75,841
Dudley Ridge Water District	283,509	0	0	0	0	0	0	0	0	0	0	283,509
Empire West Side Irrigation District	6,359	0	0	0	0	0	0	0	0	0	0	6,359
Green Valley Water District <sup>(c)</sup>	<u>5,293</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>5,293</u>
Hacienda Water District	20,659	0	0	0	0	0	0	0	0	0	0	20,659
Kern County Water Agency	2,445,228	21,000	15,000	6,000	0	0	0	6,000	0	0	0	2,493,228
Oak Flat Water District	<u>13,333</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>13,333</u>
Tracy Golf and Country Club <sup>(c)</sup>	993	3,500	0	0	0	0	0	0	0	0	0	4,493
Tulare Lake Basin Water Storage District	<u>254,984</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>254,984</u>
Subtotal	3,106,199	24,500	15,000	6,000	0	0	0	6,000	0	0	0	3,157,699
<b>SOUTHERN CALIFORNIA AREA</b>												
Antelope Valley-East Kern Water Agency	217,059	28,000	8,000	1,000	0	7,000	0	5,000	10,000	0	0	276,059
Castaic Lake Water Agency	336,532	0	10,000	0	0	0	0	0	0	0	0	346,532
Coachella Valley County Water District	15,389	0	0	0	0	0	0	0	0	0	8,000	23,389
Crestline-Lake Arrowhead Water Agency	12,097	0	0	0	0	0	0	3,000	0	0	0	15,097
Desert Water Agency	25,443	0	0	0	0	0	0	0	0	0	12,000	37,443
Little Rock Creek Irrigation District	23,732	0	0	0	0	0	0	0	0	0	0	23,732
Mojave Water Agency	63,572	1,000	0	3,000	0	7,000	0	0	0	4,000	0	78,572
Palmdale Water District	<u>24,232</u>	<u>0</u>	<u>4,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>28,232</u>
San Bernardino Valley Municipal Water District	607,715	0	4,000	0	0	0	80,000	0	0	0	5,000	696,715
San Gabriel Valley Municipal Water District	143,120	0	0	0	0	0	0	0	0	0	0	143,120
San Geronimo Pass Water Agency	68,612	0	0	0	0	0	0	0	0	0	0	68,612
The Metropolitan Water District of Southern California	4,463,746	10,000	0	0	20,000	0	0	0	0	20,000	0	4,513,746
Ventura County Flood Control District	<u>79,699</u>	<u>0</u>	<u>0</u>	<u>8,000</u>	<u>5,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>92,699</u>
Subtotal	6,080,948	39,000	26,000	12,000	25,000	14,000	80,000	8,000	10,000	24,000	25,000	6,343,948
<b>TOTAL</b>	9,646,269	70,500	41,000	48,000	25,000	14,000	80,000	14,000	10,000	25,000	25,000	9,998,769

a) Approximate only, not to be construed as invoice amounts.

b) Not a project water supply contractor. A delivery structure was constructed on the Thermalito Power Canal at the District's expense as a part of a water exchange agreement.

c) Not a project water supply contractor. District has contracted for surplus water.

TABLE B-9: CAPITAL COSTS OF

(in dollars unless otherwise indicated)

Sheet 1 of 2

TOTAL REQUIRED ADVANCE OF FUNDS										
Reach Number	Year Reach Becomes Operational	Excess Capacity (cfs)	Total Reach Capacity (cfs)	Ratio of Excess Capacity to Total Capacity (cfs/cfs) (a)	Total Reach Cost (b)	Total Advance Payments for Excess Capacity (c)	Total Incremental Costs for Excess Capacity (d)	Reconciliation of Advance Payments (e)	Interest Credit (f)	Reconciliation of Advance Payments and Interest Credit
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA										
8C	1968	188.00000	8,257.54768	0.02276705	597,582	13,605	2,000	11,605	1,667	13,272
8D	1968	188.00000	8,058.99281	0.02332798	13,942,413	325,248	113,000	212,248	30,109	242,357
9	1968	188.00000	7,268.54004	0.02586489	9,162,227	236,980	71,000	165,980	32,640	198,620
10A	1968	188.00000	7,117.74784	0.02641285	9,710,336	256,478	92,000	164,478	32,106	196,584
11B	1968	188.00000	6,313.19561	0.02977890	13,692,127	407,736	108,000	299,736	60,463	360,199
12D	1969	188.00000	5,929.95263	0.03170346	11,888,004	376,891	156,000	220,891	46,967	267,858
12E	1969	188.00000	5,907.22734	0.03182542	7,484,322	238,192	118,000	120,192	24,967	145,159
13B	1969	188.00000	5,341.25081	0.03519775	16,313,712	574,206	139,000	435,206	75,150	510,356
14A	1970	188.00000	5,008.96939	0.03753267	55,742,657	2,092,171	559,000	1,533,171	381,330	1,914,501
14B	1970	188.00000	4,888.19779	0.03845998	10,081,251	387,725	175,000	212,725	55,369	268,094
14C	1970	188.00000	4,700.84105	0.03999284	9,083,502	363,275	223,000	140,275	36,501	176,776
15A	1970	188.00000	4,597.94994	0.04088779	38,646,108	1,580,154	593,000	987,154	200,521	1,187,675
16A	1971	188.00000	4,387.78387	0.04284623	62,627,071	2,683,334	995,000	1,688,334	448,974	2,137,308
17E	1971	188.00000	4,136.09906	0.04545346	224,099,973	10,186,119	5,811,000	4,375,119	1,264,021	5,639,140
17F	1971	188.00000	4,126.98262	0.04555386	58,567,574	2,667,979	1,396,000	1,271,979	444,423	1,716,402
25	1971	787.00000	2,019.63064	0.38967521	30,989,289	12,075,758	6,823,844	5,251,914	1,368,192	6,620,106
28J	1973	-	-	-	-	4,378,641	4,378,641	0	0	0
SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT										
25	1971	21.00000	2,019.63064	0.01039794	31,022,106	322,566	182,156	140,410	36,579	176,989
ANTELOPE VALLEY-EAST KERN WATER AGENCY										
29A	1971	19.00000	3,128.83908	0.00607254	29,976,119	182,032	85,000	97,032	22,045	119,077
29F	1971	19.00000	3,128.01611	0.00607414	13,582,587	82,503	24,000	58,503	15,039	73,542

a) Column 1 divided by Column 2.

b) Reach costs are compounded at the project interest rate of 4.342 percent per annum as follows:

Reaches	Period	Year costs compounded to
8C thru 17F	1952 - 1965	1965
25 (for MWD)	1952 - 1966	1966
25 (for SGVWMD)	1952 - 1967	1967
29A and 29F	1952 - 1967	1967

c) Column 3 multiplied by Column 4.

d) As shown in Table B-7, except, prior Incremental Costs for Reach 28J have been brought forward with interest at 4.457% to 1966 for purposes of repayment.

e) Column 5 less Column 6.

f) Interest on Advance Payments in excess of Incremental Costs is at 5.5 percent per annum, approximate average rate of interest earnings during the period.

g) Actual payments are shown for 1966 through 1973 with 1974 adjusted to reflect overpayments and underpayments without interest for prior years.

h) Interest for overpayments and underpayments under the provisions of Amendment 2 of the contract.

i) Interest for overpayments and underpayments under the provisions of Amendment 5 of the contract.

j) Reach totals include Reconciliation of Advance Payments and Interest Credit (Column 9)

k) Advance payments in excess of incremental costs under the provisions of the contract reduce the capital cost component of the Transportation Charge.

# REQUESTED EXCESS PEAKING CAPACITY

(in dollars)

Sheet 2 of 2

ANNUAL REQUIRED ADVANCE OF FUNDS												
Reach Number	Item	Estimated Costs and Advance Payments by Calendar Year										Reach Totals <sup>(j)</sup>
		1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	
		(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA												
8C	1. Incremental Costs		1,000	1,000								2,000
	2. Advance Payments		6,803	6,802		-13,272						333
8D	1. Incremental Costs	4,000	45,000	64,000								113,000
	2. Advance Payments	11,513	129,524	184,211		-242,357						82,891
9	1. Incremental Costs	4,000	24,000	35,000	8,000							71,000
	2. Advance Payments	13,351	80,106	116,821	26,702		-198,620					38,360
10A	1. Incremental Costs	5,000	30,000	46,000	11,000							92,000
	2. Advance Payments	13,939	83,634	128,239	30,666		-196,584					59,894
11B	1. Incremental Costs	7,000	42,000	48,000	11,000							108,000
	2. Advance Payments	26,427	158,564	181,216	41,529		-360,199					47,537
12D	1. Incremental Costs	16,000	20,000	18,000	84,000	18,000						156,000
	2. Advance Payments	38,655	48,319	43,487	202,941	43,489		-267,858				109,033
12E	1. Incremental Costs	10,000	14,000	14,000	66,000	14,000						118,000
	2. Advance Payments	20,186	28,260	28,260	133,226	28,260		-145,159				93,033
13B	1. Incremental Costs	1,000	2,000	14,000	96,000	26,000						139,000
	2. Advance Payments	4,131	8,262	57,834	396,574	107,405		-510,356				63,850
14A	1. Incremental Costs	51,000	65,000	39,000	194,000	150,000	60,000					559,000
	2. Advance Payments	190,878	243,276	145,965	726,084	561,405	224,563		-1,914,501			177,670
14B	1. Incremental Costs	31,000	14,000	10,000	45,000	63,000	12,000					175,000
	2. Advance Payments	68,683	31,018	22,156	99,701	139,581	26,566		-268,094			119,631
14C	1. Incremental Costs	39,000	18,000	13,000	58,000	80,000	15,000					223,000
	2. Advance Payments	63,532	29,323	21,177	94,484	130,323	24,436		-176,776			186,499
15A	1. Incremental Costs	4,000	10,000	46,000	243,000	162,000	128,000					593,000
	2. Advance Payments	10,659	26,647	122,575	647,517	431,678	341,078		-1,187,675			392,479
16A	1. Incremental Costs	14,000	12,000	56,000	387,000	357,000	119,000	50,000				995,000
	2. Advance Payments	37,755	32,362	151,022	1,043,669	962,764	320,921	134,841		-2,137,308		546,026
17E	1. Incremental Costs	30,000	259,000	1,159,000	1,971,000	1,565,000	551,000	276,000				5,811,000
	2. Advance Payments	52,587	454,002	2,031,615	3,454,972	2,743,293	965,850	483,800		-5,639,140		4,546,979
17F	1. Incremental Costs	78,000	203,000	468,000	349,000	276,000	15,000	7,000				1,396,000
	2. Advance Payments	149,070	387,965	894,423	666,995	527,480	28,667	13,379		-1,716,402		951,577
25	1. Incremental Costs			932,118	2,289,874	1,910,988	1,211,656	479,208				6,823,844
	2. Advance Payments			1,649,515	4,052,256	3,381,764	2,144,197	848,026		-6,620,106		5,455,652
28J	1. Incremental Costs		304,612	13,706	296,668	65,966	230,169	1,209,586	2,017,134	235,900	4,900	4,378,641
	2. Advance Payments		304,612	13,706	296,668	65,966	230,169	1,209,586	2,017,134	235,900	4,900	4,378,641
Totals Unadjusted for past payments	1. Incremental Costs	294,000	1,063,612	2,976,824	6,109,542	4,687,954	2,341,825	2,021,794	2,017,134	235,900	4,900	21,753,485
	2. Advance Payments	701,366	2,052,677	5,799,024	11,913,984	8,867,779	3,551,064	1,766,259	-1,529,912	-15,877,056	4,900	17,250,085
Current Adjustments	1. Advance Payments and Adjustments - Amendment 2 <sup>(g)</sup>	0	8,056,000	9,094,963	1,523,252	8,310,651	3,426,736	1,086,045	-4,244,807	-14,381,396 <sup>(k)</sup>		12,871,444
	2. Interest Credits - Amendment 2 <sup>(h)</sup>									-1,532,433 <sup>(k)</sup>		-1,532,433
	3. Advance Payments and Adjustments - Amendment 5 <sup>(g)</sup>	0	1,240,000	1,483,180	2,469,325	-927,035	1,729,160	3,215,258	2,967,475	1,690,000	-9,488,722	4,378,641
	4. Interest Credits - Amendment 5 <sup>(i)</sup>										-2,721,803	-2,721,803
	5. Net Required Advance of Funds	0	9,296,000	10,578,143	3,992,577	7,383,616	5,155,896	4,301,303	-1,277,332	-14,223,829	-12,210,525 <sup>(k)</sup>	12,995,849
SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT												
25	1. Incremental Costs	0	0	24,882	61,126	51,012	32,344	12,792				182,156
	2. Advance Payments	0	0	44,062	108,243	90,333	57,275	22,653		-176,989		145,577
Totals Unadjusted for past payments	1. Incremental Costs	0	0	24,882	61,126	51,012	32,344	12,792				182,156
	2. Advance Payments	0	0	44,062	108,243	90,333	57,275	22,653		-176,989		145,577
Current Adjustments	1. Advance Payments and Adjustments <sup>(g)</sup>	0	0	0	184,422	49,052	44,911	61,588	-20,263	-174,133		145,577
	2. Interest Credit									-6,332		-6,332
	3. Net Required Advance of Funds	0	0	0	184,422	49,052	44,911	61,588	-20,263 <sup>(k)</sup>	-180,465 <sup>(k)</sup>		139,245
ANTELOPE VALLEY-EAST KERN WATER AGENCY												
29A	1. Incremental Costs	0	0	8,000	14,000	26,000	26,000	11,000				85,000
	2. Advance Payments	0	0	17,132	29,982	55,680	55,680	23,558		-119,077		62,955
29F	1. Incremental Costs	0	0	3,000	4,000	14,000	2,000	1,000				24,000
	2. Advance Payments	0	0	10,313	13,751	48,127	6,875	3,437		-73,542		8,961
Totals Unadjusted for past payments	1. Incremental Costs	0	0	11,000	18,000	40,000	28,000	12,000				109,000
	2. Advance Payments	0	0	27,445	43,733	103,807	62,555	26,995		-192,619		71,916
Current Adjustments	1. Advance Payments and Adjustments <sup>(g)</sup>				85,495	52,625	101,648	34,062	-12,794	-189,120		71,916
	2. Interest Credit	0	0	0						-16,234		-16,234
	3. Net Required Advance of Funds	0	0	0	85,495	52,625	101,648	34,062	-12,794	-205,354 <sup>(k)</sup>		55,682

TABLE B-10: CAPITAL COSTS OF EACH AQUEDUCT REACH TO BE REIM-

(in dollars)

Sheet 1 of 4

Calendar Year	UPPER FEATHER DIVISION	NORTH BAY AQUEDUCT				SOUTH BAY AQUEDUCT			
		Reach 1	Reach 2	Reach 3	Total	Reach 1	Reach 2	Reach 4	Reach 5
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1952	0	0	0	0	0	97	34	30	57
1953	0	0	0	0	0	477	166	144	297
1954	0	0	0	0	0	1,466	508	437	959
1955	0	0	0	0	0	1,944	674	560	1,266
1956	0	0	0	0	0	18,789	6,515	5,090	12,545
1957	0	13,290	3,391	9,953	26,634	45,090	15,639	12,285	33,218
1958	2	19,202	5,011	25,798	50,011	195,985	80,961	7,714	21,930
1959	14	7,517	2,118	17,653	27,288	496,140	148,516	24,945	17,118
1960	28	8,797	4,292	4,838	17,927	1,130,378	67,351	71,779	68,028
1961	9	1,531	10,312	2,515	14,358	3,273,225	180,594	307,878	74,380
1962	32	217	1,751	414	1,120	1,548,882	204,000	695,494	35,102
1963	51	2,510	1,063	983	2,430	480,731	69,317	2,284,293	206,587
1964	7,791	39,879	12,046	21,934	73,859	2,549,118	15,903	181,921	264,410
1965	3,139	72,793	17,900	170,361	261,054	807,506	153,454	85,416	447,830
1966	48	59,640	12,985	439,437	512,062	898,074	149,529	142,096	1,691,663
1967	47	47,334	11,637	1,551,899	1,610,870	607,614	50,423	293,304	3,499,440
1968	51,573	69,648	18,137	826,469	914,254	964,046	19,490	89,052	2,923,187
1969	234,242	62,973	22,232	46,428	131,633	455,173	9,618	3,856	887,291
1970	16,233	58,744	41,245	9,985	109,974	53,327	3,411	10,696	155,755
1971	27,204	19,787	28,376	8,606	56,769	23,120	4,547	5,063	20,649
1972	9	14,751	11,433	9,999	36,183	25,580	684	2,807	25,919
1973	25	17,731	27,940	39,725	85,396	22,057	3,731	5,688	12,221
1974	53	66,108	27,272	134,885	228,265	14,987	966	1,557	65,819
1975	16	69,603	65,437	49,307	184,347	56,449	566	1,161	7,445
1976	0	223,204	364,259	46,000	633,463	26,000	6,000	9,000	15,000
1977	0	612,069	467,330	123,000	1,202,399	3,000	1,000	2,000	2,000
1978	0	807,638	408,992	276,000	1,492,630	0	0	0	0
1979	0	706,209	140,191	331,000	1,177,400	0	0	0	0
1980	0	3,324,040	1,533,546	483,000	5,340,586	0	0	0	0
1981	0	5,766,036	1,948,740	1,647,000	9,361,776	0	0	0	0
1982	0	1,341,000	297,000	590,000	2,228,000	0	0	0	0
1983	0	46,000	9,000	2,000	57,000	0	0	0	0
1984	0	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0	0
TOTAL	340,420	13,478,251	5,488,008	6,869,189	25,835,448	13,699,255	1,193,597	4,244,266	10,490,116

Calendar Year	SOUTH BAY AQUEDUCT (continued)					CALIFORNIA AQUEDUCT			
						NORTH SAN JOAQUIN DIVISION			
	Reach 6	Reach 7	Reach 8	Reach 9	Total	Reach 1	Reach 2A	Reach 2B	Subtotal
	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
1952	8	66	72	132	496	4,029	3,293	1,505	8,827
1953	38	327	336	640	2,425	10,602	8,624	3,980	23,206
1954	123	1,005	1,003	1,954	7,455	13,853	11,209	5,201	30,263
1955	160	1,293	1,149	2,454	9,500	7,400	5,976	2,771	16,147
1956	1,559	11,959	11,043	28,372	95,872	9,920	5,041	2,408	17,369
1957	3,659	28,675	27,385	563,114	729,065	12,003	5,478	2,623	20,104
1958	2,243	17,872	17,385	560,904	904,994	18,600	15,596	7,253	41,449
1959	357	3,200	3,568	149,874	843,718	123,610	98,958	44,880	267,448
1960	1,102	2,944	4,498	359,749	1,705,829	192,195	102,457	49,126	343,778
1961	4,725	18,318	22,757	1,384	3,880,493	154,290	194,581	42,983	391,854
1962	17,295	160,939	178,242	209,042	3,048,996	614,752	493,223	168,968	1,276,943
1963	265,414	1,250,386	939,832	129,902	5,626,462	2,001,428	1,531,989	686,896	4,220,313
1964	100,603	1,716,371	2,327,770	2,942,657	10,098,753	4,693,541	2,379,598	702,947	7,776,086
1965	42,346	368,476	637,266	1,921,847	4,464,141	5,901,477	6,902,119	2,988,209	15,791,805
1966	17,663	34,915	140,350	777,872	3,852,162	8,590,933	14,173,122	5,701,633	28,465,688
1967	41,567	137,856	147,183	379,764	5,074,017	9,722,667	10,717,152	6,675,286	27,115,105
1968	84,529	2,067	67,958	252,896	4,403,225	6,414,528	893,391	1,307,285	8,615,204
1969	4,279	11,572	162,300	32,000	1,566,089	3,557,438	788,501	445,760	4,791,699
1970	2,455	6,850	20,146	15,540	237,100	2,250,713	151,018	116,990	2,518,721
1971	4,167	6,919	17,652	39,026	121,143	100,290	215,372	69,176	384,838
1972	1,014	160	4,728	32,040	92,932	160,678	43,380	7,511	211,569
1973	217	910	7,345	9,381	61,550	106,425	25,037	22,225	153,687
1974	475	6,052	30,655	11,390	131,901	177,672	17,238	46,182	241,092
1975	116	669	1,066	3,429	70,901	235,713	13,917	168,463	418,093
1976	4,000	5,000	7,000	9,000	81,000	685,363	92,364	18,740	796,467
1977	1,000	1,000	2,000	2,000	14,000	870,759	13,386	9,370	893,515
1978	0	0	0	0	0	1,802,425	6,693	4,685	1,813,803
1979	0	0	0	0	0	3,015,197	4,016	2,677	3,021,890
1980	0	0	0	0	0	4,214,582	2,008	1,339	4,217,929
1981	0	0	0	0	0	2,449,638	1,339	669	2,451,646
1982	0	0	0	0	0	1,443,680	1,339	669	1,445,688
1983	0	0	0	0	0	55,552	669	669	56,890
1984	0	0	0	0	0	669	669	669	2,007
1985	0	0	0	0	0	1,338	1,338	1,338	4,014
TOTAL	517,980	3,795,801	4,780,689	8,402,515	47,124,219	59,613,960	38,920,091	19,311,086	117,845,137



# BURSED THRU CAPITAL COST COMPONENT OF TRANSPORTATION CHARGE

(in dollars)

Sheet 2 of 4

Calendar Year	CALIFORNIA AQUEDUCT (continued)								
	SAN LUIS DIVISION						SOUTH SAN JOAQUIN DIVISION		
	Reach 3	Reach 4	Reach 5	Reach 6	Reach 7	Subtotal	Reach 8C	Reach 8D	Reach 9
	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
1952	2,503	3,651	4,100	1,039	1,430	12,723	14	747	1,140
1953	7,028	10,434	11,301	2,915	3,980	35,658	46	2,748	4,305
1954	8,739	12,903	14,086	3,622	4,904	44,254	51	2,797	4,141
1955	4,290	6,228	7,007	1,777	2,391	21,693	21	913	1,132
1956	3,309	5,761	6,024	1,486	3,658	20,238	100	3,959	4,500
1957	3,558	6,289	6,539	1,610	4,113	22,109	241	10,909	13,587
1958	14,760	24,789	28,201	7,050	9,446	84,246	357	17,999	23,554
1959	26,388	46,164	49,308	12,196	24,051	158,107	417	19,497	24,063
1960	207,196	49,826	45,840	13,603	42,421	358,886	1,718	45,741	25,878
1961	185,050	300,747	175,263	39,393	71,978	772,431	4,060	77,842	31,706
1962	497,579	565,653	259,915	23,101	27,745	1,373,993	6,304	163,917	64,118
1963	2,780,042	2,092,497	2,570,171	68,252	31,482	7,542,444	6,028	165,746	83,620
1964	4,364,497	5,073,472	1,083,366	166,043	258,654	10,946,032	4,126	93,176	121,226
1965	3,874,388	5,850,990	2,952,036	1,102,793	686,888	14,467,095	15,479	501,146	589,347
1966	2,320,907	8,774,583	5,931,680	4,351,563	7,929,572	29,308,305	206,919	5,344,512	2,614,703
1967	43,547	2,132,737	7,144,070	230,697	6,868,846	16,332,803	217,443	5,105,685	3,451,551
1968	117,850	406,091	1,001,084	184,830	473,757	2,183,612	56,817	636,715	972,002
1969	7,353	130,041	100,956	110,156	164,691	498,491	57,411	122,709	87,569
1970	31,326	25,468	107,665	839,704	1,235,284	509,103	14,381	119,596	87,062
1971	100,810	235,370	314,618	28,006	351,467	1,030,271	6,637	37,006	24,405
1972	16,297	87,815	12,808	13,882	285,606	416,408	8,854	16,217	17,313
1973	7,515	76,825	14,319	7,502	21,502	127,663	3,338	15,070	14,715
1974	11,722	83,393	25,229	9,939	58,055	183,338	5,548	19,203	9,006
1975	19,397	93,968	9,201	5,080	144,891	272,537	4,379	17,601	13,900
1976	10,621	80,510	19,400	9,700	13,580	133,811	18,430	100,880	81,480
1977	1,416	7,760	5,820	3,880	5,820	24,696	3,880	50,440	24,250
1978	1,416	5,820	3,880	2,910	3,880	17,906	1,940	17,460	7,760
1979	708	3,880	1,940	1,940	1,940	10,408	970	970	1,940
1980	0	1,940	970	970	970	4,850	1,940	13,580	9,700
1981	708	49,470	219,220	97,970	122,220	489,588	2,910	17,460	11,640
1982	708	146,470	655,720	291,970	364,720	1,459,588	970	970	970
1983	708	421,950	1,500,590	648,930	818,680	3,390,858	970	970	970
1984	708	1,442,390	2,974,990	1,159,150	1,518,050	7,095,288	970	970	970
1985	1,416	1,660,640	2,922,610	1,088,340	1,451,120	7,124,126	1,940	1,940	1,940
TOTAL	14,572,660	29,865,589	30,179,927	8,852,591	23,007,792	106,478,559	655,609	12,747,091	8,426,163

Calendar Year	CALIFORNIA AQUEDUCT (continued)								
	SOUTH SAN JOAQUIN DIVISION (continued)								
	Reach 10A	Reach 11B	Reach 12D	Reach 12E	Reach 13B	Reach 14A	Reach 14B	Reach 14C	Reach 15A
	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)
1952	715	1,315	2,036	1,024	1,710	818	219	219	1,966
1953	2,642	4,928	7,694	3,852	6,415	2,673	754	763	7,217
1954	2,901	4,994	7,780	3,900	6,499	2,964	833	841	7,275
1955	1,128	1,604	2,474	1,246	2,083	1,217	333	336	2,318
1956	4,555	6,401	9,498	4,873	8,284	7,226	1,687	1,629	10,225
1957	13,649	19,309	29,916	15,033	25,111	16,099	3,943	3,976	27,642
1958	23,569	44,252	72,354	36,010	56,543	36,272	13,221	12,713	55,179
1959	24,155	63,536	101,906	50,928	81,603	68,351	23,301	23,050	77,381
1960	48,710	67,893	79,656	40,753	64,919	86,865	23,954	22,974	75,652
1961	70,430	47,343	90,737	52,895	28,754	249,561	93,871	67,414	154,403
1962	59,318	57,614	71,089	46,094	50,523	214,040	63,222	48,937	137,425
1963	54,056	94,527	178,935	88,866	69,650	437,617	107,365	80,138	103,318
1964	127,504	343,088	299,208	179,419	88,665	1,124,883	703,521	498,850	583,951
1965	649,529	1,086,113	1,554,641	1,066,779	201,098	3,434,895	1,673,446	1,441,244	487,213
1966	2,879,686	3,793,143	673,395	465,453	427,907	4,992,614	990,746	728,371	1,870,086
1967	3,740,400	4,740,506	1,936,559	1,277,470	1,272,056	2,836,248	530,547	398,691	1,734,783
1968	1,058,665	1,358,967	4,804,373	3,189,001	8,525,369	10,388,397	1,342,576	1,401,539	7,556,415
1969	149,264	235,745	721,937	540,376	3,816,433	15,504,148	1,215,992	1,102,519	9,772,527
1970	76,877	88,087	74,083	75,841	332,892	11,417,918	1,017,574	755,495	9,094,582
1971	16,048	46,630	46,667	44,701	351,242	3,047,079	199,040	38,034	3,421,542
1972	20,316	33,811	46,066	25,950	85,132	1,435,332	105,090	21,107	1,037,103
1973	16,200	18,789	10,694	17,791	26,146	696,480	16,248	10,736	824,296
1974	16,394	15,702	17,699	27,270	28,687	543,147	22,232	19,080	813,488
1975	16,121	14,195	11,980	14,691	28,320	272,190	25,721	22,039	377,930
1976	92,150	64,020	59,170	64,020	92,150	402,841	66,930	48,500	283,531
1977	26,190	16,490	25,220	18,430	24,250	117,661	20,370	13,580	71,101
1978	7,760	6,790	7,760	5,820	8,730	48,500	8,730	3,880	28,130
1979	1,940	1,940	970	970	1,940	30,070	3,880	970	18,430
1980	10,670	7,760	5,820	8,730	11,640	56,260	10,670	6,790	57,230
1981	12,610	8,730	7,760	9,700	13,580	59,170	11,640	8,730	69,840
1982	970	970	970	970	970	1,940	970	970	1,940
1983	970	970	970	970	970	1,940	970	970	970
1984	970	970	970	970	970	970	970	970	970
1985	1,940	1,940	1,940	1,940	1,940	1,940	1,940	1,940	1,940
TOTAL	9,229,002	12,299,072	10,962,927	7,382,736	15,743,181	57,538,326	8,302,506	6,787,995	38,767,999

TABLE B-10: CAPITAL COSTS OF EACH AQUEDUCT REACH TO BE REIM-

(in dollars)

Sheet 3 of 4

Calendar Year	CALIFORNIA AQUEDUCT (continued)								
	SOUTH SAN JOAQUIN DIVISION (continued)		TEHACHAPI DIVISION			MOJAVE DIVISION			
	Reach 16A	Subtotal	Reach 17E	Reach 17F	Subtotal	Reach 18A	Reach 19	Reach 19C	Reach 20A
	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)	(45)
1952	4,568	16,491	9,980	4,188	14,168	4,208	1,563	0	2,634
1953	16,986	61,023	32,234	13,666	45,900	12,971	4,819	0	7,453
1954	17,076	62,052	47,566	20,582	68,148	17,118	6,360	0	9,779
1955	5,373	20,178	26,622	11,687	38,309	5,773	2,145	0	2,602
1956	22,377	85,314	48,847	18,113	66,960	6,210	2,307	0	2,511
1957	64,451	243,866	123,100	50,537	173,637	22,988	8,542	0	9,293
1958	147,291	539,314	168,754	74,157	242,911	39,003	14,570	123	15,832
1959	222,658	780,846	155,722	59,540	215,262	39,725	24,122	1,102	24,281
1960	211,245	795,958	209,024	46,614	255,638	21,962	26,837	5,318	41,681
1961	211,999	1,181,015	398,396	87,858	486,254	35,834	36,109	2,230	34,259
1962	176,117	1,158,718	362,995	84,897	447,892	70,001	272,918	1,841	9,780
1963	496,909	1,966,775	1,225,260	128,213	1,353,473	28,332	424,574	4,137	20,550
1964	1,833,056	6,000,673	1,918,964	797,112	2,716,076	98,266	726,255	8,564	44,347
1965	1,291,460	13,992,390	2,619,141	2,380,351	4,999,492	124,314	736,115	9,156	111,260
1966	2,963,649	27,951,184	5,489,541	9,648,092	15,137,633	376,638	1,704,068	13,365	163,309
1967	3,496,526	30,738,465	26,289,364	12,554,862	38,844,226	1,341,566	907,357	24,086	646,609
1968	7,555,545	48,846,381	32,918,186	7,543,049	40,461,235	139,921	7,311,843	71,404	1,942,214
1969	13,332,770	46,659,400	40,855,124	7,067,991	47,923,115	210,942	2,522,188	6,951	6,097,441
1970	14,288,252	37,442,640	37,216,769	7,176,483	44,393,252	2,150,402	1,153,919	6,254	3,688,386
1971	8,218,787	15,497,818	21,131,939	7,025,518	28,157,457	1,538,413	286,474	7,000	1,098,084
1972	3,137,912	5,990,203	10,477,855	35,830	10,513,685	123,777	395,493	3,628	452,775
1973	1,520,517	3,191,020	3,196,910	37,283	3,234,193	24,071	78,200	2,878	103,767
1974	1,072,338	2,609,794	5,403,086	263,634	5,666,720	32,397	64,804	2,708	135,024
1975	498,473	1,317,540	2,215,826	425,229	2,641,055	42,630	49,856	4,272	58,317
1976	692,968	2,067,070	1,303,292	161,990	1,465,282	196,910	100,880	4,137	69,840
1977	140,068	551,930	541,745	9,700	551,445	781,820	23,280	1,040	28,130
1978	55,290	208,550	412,250	2,910	415,160	2,373,590	10,670	1,033	4,850
1979	33,950	98,940	696,460	970	697,430	2,893,510	2,910	1,031	2,910
1980	98,940	299,730	2,973,050	0	2,973,050	3,415,370	970	0	970
1981	123,190	356,960	6,553,320	970	6,554,290	2,757,710	970	83,534	970
1982	2,910	16,490	8,649,490	970	8,650,460	884,640	970	239,840	970
1983	1,940	14,550	7,276,940	970	7,277,910	134,830	970	965,176	970
1984	970	12,610	3,775,240	970	3,776,210	10,670	970	7,992,714	970
1985	1,940	25,220	909,860	1,940	911,800	1,940	1,940	9,531,864	1,940
TOTAL	61,958,501	250,801,108	225,632,852	55,736,876	281,369,728	19,958,452	16,905,968	18,995,386	14,834,708

Calendar Year	CALIFORNIA AQUEDUCT (continued)								
	MOJAVE DIVISION (continued)							SANTA ANA DIVISION	
	Reach 20B	Reach 21	Reach 22A	Reach 22B	Reach 23	Reach 24	Subtotal	Reach 25	Reach 26A
	(46)	(47)	(48)	(49)	(50)	(51)	(52)	(53)	(54)
1952	917	5,954	36	2,071	2,133	2,481	21,997	3,429	5,759
1953	3,498	18,356	73	5,917	7,083	7,651	67,821	10,570	17,758
1954	4,678	24,232	380	8,805	8,073	10,100	89,525	13,953	23,441
1955	2,275	8,174	185	2,833	2,803	3,408	30,198	4,708	7,908
1956	2,731	8,785	221	2,989	3,047	3,662	32,463	5,059	8,500
1957	10,109	32,521	822	11,064	11,274	13,556	120,169	18,726	31,460
1958	17,234	55,104	1,438	19,254	19,108	23,275	204,941	31,889	53,508
1959	19,137	58,349	1,896	26,149	20,954	46,952	262,667	40,452	59,802
1960	38,243	45,141	11,346	140,662	17,640	112,950	461,780	67,527	96,373
1961	36,714	21,443	14,263	216,839	9,741	381,438	788,870	27,643	57,974
1962	10,301	8,038	3,969	166,204	4,422	282,246	829,720	10,194	37,079
1963	24,394	19,160	9,395	181,668	6,607	336,551	1,055,368	31,302	111,795
1964	72,939	34,742	23,340	269,795	7,046	250,511	1,535,805	71,610	208,327
1965	353,016	93,544	67,422	850,190	12,158	638,741	2,995,916	287,098	212,169
1966	1,348,644	164,873	183,349	1,786,444	31,643	1,049,344	6,821,677	427,209	370,240
1967	1,728,372	506,134	371,559	3,168,225	62,660	2,369,273	11,125,841	3,308,174	5,646,082
1968	2,353,887	1,176,088	1,177,940	4,705,928	104,655	2,543,725	21,527,605	7,864,260	1,299,169
1969	5,769,435	2,431,918	1,553,761	7,925,050	267,628	11,431,769	38,217,089	6,523,187	1,813,738
1970	5,395,832	3,301,604	2,113,834	23,905,155	1,273,588	17,260,835	60,249,809	1,697,702	7,426,036
1971	1,116,218	845,778	441,639	17,390,847	1,973,845	5,522,273	30,220,571	911,010	10,058,046
1972	622,450	484,448	321,501	4,322,304	39,009	797,564	7,562,949	1,377,485	5,646,805
1973	77,871	57,294	34,137	1,665,335	24,854	4,380,678	6,449,085	140,901	1,862,349
1974	85,364	80,303	29,280	5,669,584	34,555	799,735	6,933,754	71,338	1,987,322
1975	144,022	157,003	17,057	4,935,112	18,590	397,214	5,824,073	170,921	3,891,842
1976	305,550	40,740	26,190	4,118,038	19,400	171,690	5,053,375	389,940	1,722,138
1977	55,290	18,430	9,700	1,565,968	5,820	44,620	2,534,098	9,700	214,758
1978	5,820	4,850	2,910	94,090	1,940	14,550	2,514,303	1,940	23,280
1979	2,910	1,940	970	63,050	11,640	1,940	2,982,811	970	15,520
1980	970	970	0	8,730	0	970	3,428,950	0	2,910
1981	970	970	970	970	970	970	2,849,004	970	970
1982	970	970	970	2,910	970	970	1,134,180	970	970
1983	970	970	970	1,940	970	970	1,108,736	970	970
1984	970	970	970	970	970	970	8,011,144	970	970
1985	1,940	1,940	1,940	1,940	1,940	1,940	9,549,324	1,940	1,940
TOTAL	19,614,641	9,711,736	6,424,433	83,237,036	4,007,736	48,905,522	242,595,618	23,524,717	37,834,908

# BURSED THRU CAPITAL COST COMPONENT OF TRANSPORTATION CHARGE

(in dollars)

Sheet 4 of 4

Calendar Year	CALIFORNIA AQUEDUCT (continued)									
	SANTA ANA DIVISION (continued)					WEST BRANCH				
	Reach 28G <sup>(a)</sup>	Reach 28H	Reach 28J	Subtotal		Reach 29A	Reach 29 F	Reach 29G	Reach 29H	Reach 29J
	(55)	(56)	(57)	(58)		(59)	(60)	(61)	(62)	(63)
1952	4,922	4,170	3,106	21,386		3,007	139	180	472	569
1953	16,026	11,842	9,748	65,944		9,352	353	244	1,803	1,731
1954	18,531	18,618	12,507	87,050		7,601	1,234	2,293	2,418	4,282
1955	6,226	6,255	4,269	29,366		1,047	601	1,117	1,178	2,086
1956	6,683	6,713	4,609	31,564		502	718	1,332	1,405	2,488
1957	24,732	24,848	17,062	116,828		1,860	2,656	4,931	5,202	9,209
1958	42,012	42,208	29,286	198,903		3,350	4,647	8,963	9,133	16,301
1959	47,056	47,262	45,602	240,174		8,181	9,413	19,969	18,766	36,600
1960	60,789	60,219	122,368	407,276		22,374	15,416	35,426	30,614	71,741
1961	32,784	34,968	722,784	876,153		22,402	11,955	21,291	20,167	40,558
1962	21,793	20,901	61,489	151,456		41,038	28,934	88,985	59,609	111,872
1963	41,258	38,588	1,871,018	2,093,961		86,720	56,844	158,965	108,102	215,776
1964	92,193	46,980	104,427	523,537		154,850	68,140	213,746	147,329	299,577
1965	99,647	79,011	155,399	833,324		371,983	79,892	414,427	130,974	606,382
1966	175,122	317,363	606,650	1,896,584		500,644	208,497	1,268,986	355,724	3,317,700
1967	236,476	287,456	1,199,421	5,677,609		1,615,765	891,473	1,208,281	907,515	31,785,653
1968	895,357	273,351	817,785	11,149,922		3,995,086	303,881	405,337	1,131,841	36,793,154
1969	1,148,337	1,485,000	949,437	11,919,699		6,753,121	323,936	707,172	1,210,886	8,682,902
1970	1,884,891	1,029,708	3,970,670	16,009,007		8,110,333	6,237,717	2,679,141	3,068,418	8,108,741
1971	16,549,144	6,584,125	12,468,622	46,570,947		4,368,036	3,888,217	1,155,631	8,475,109	5,821,818
1972	1,486,899	12,377,556	22,148,401	42,954,146		1,927,415	446,221	1,013,865	19,324,448	23,820,363
1973	216,291	254,296	3,827,414	6,301,251		798,884	165,403	436,921	9,750,187	1,840,384
1974	171,328	111,340	2,118,727	4,460,055		553,980	158,561	173,530	4,174,178	3,592,107
1975	131,732	157,631	1,574,021	5,926,147		340,614	425,236	977,342	621,412	336,698
1976	98,940	135,800	1,878,371	4,225,189		786,088	506,340	2,472,530	254,678	979,239
1977	17,460	46,560	161,020	449,498		228,338	359,870	11,570,160	1,011,710	31,040
1978	3,880	2,910	16,490	48,500		61,110	4,838,360	23,615,620	220,190	13,580
1979	1,940	970	1,940	21,340		44,620	4,153,540	26,371,390	353,080	12,610
1980	970	0	970	4,850		5,820	891,430	16,664,600	3,880	5,820
1981	970	970	970	4,850		970	970	4,091,460	1,940	970
1982	970	970	970	4,850		1,940	970	238,620	970	970
1983	970	970	1,112	4,992		1,940	970	970	970	970
1984	970	970	970	4,850		970	970	970	970	970
1985	1,940	1,940	1,940	9,700		1,940	1,940	1,940	1,940	1,940
TOTAL	23,539,239	23,512,469	54,909,575	163,320,908		30,831,881	24,085,444	96,026,335	51,407,218	71,741,861

Calendar Year	CALIFORNIA AQUEDUCT (continued)							GRAND TOTAL	
	WEST BRANCH (continued)		COASTAL BRANCH						TOTAL
	Reach 30	Subtotal	Reach 31A	Reach 33A	Reach 34	Reach 35	Subtotal		
	(64)	(65)	(66)	(67)	(68)	(69)	(70)	(71)	(72)
1952	1,448	5,815	0	0	0	0	0	101,407	101,903
1953	4,470	17,953	0	0	0	0	0	317,505	319,930
1954	5,909	23,737	0	0	0	0	0	405,029	412,484
1955	1,999	8,028	0	0	0	0	0	163,919	173,419
1956	2,136	8,581	0	0	0	0	0	262,489	358,361
1957	7,907	31,765	0	0	0	0	0	728,478	1,484,177
1958	14,331	56,725	0	0	0	0	0	1,368,489	2,323,496
1959	45,653	138,582	28,046	49,114	7,441	8,236	92,837	2,155,923	3,026,943
1960	87,117	262,688	34,404	70,450	8,507	14,265	127,626	3,013,630	4,737,414
1961	118,285	234,658	13,774	17,752	1,492	3,898	36,916	4,768,151	8,663,011
1962	354,005	684,443	10,121	7,798	524	1,689	20,132	5,943,297	8,991,205
1963	432,675	1,059,082	20,470	14,299	880	2,943	38,592	19,330,008	24,958,951
1964	1,410,463	2,294,105	315,418	26,963	1,687	5,639	349,707	32,142,021	42,322,424
1965	3,478,911	5,082,569	747,023	36,178	2,118	7,060	792,379	58,954,970	63,683,304
1966	9,635,187	15,286,738	2,258,018	35,767	1,737	5,765	2,301,287	127,169,096	131,533,272
1967	18,225,077	54,633,764	6,307,446	37,935	1,893	6,217	6,353,491	190,821,304	197,506,238
1968	16,646,840	59,276,139	2,704,814	30,561	1,320	4,360	2,741,055	194,801,153	200,170,205
1969	17,881,643	35,559,660	423,797	26,255	909	2,910	453,871	186,023,024	187,954,988
1970	23,210,106	51,414,456	270,460	24,804	860	2,806	298,930	212,835,918	213,199,225
1971	17,567,403	41,276,214	163,953	33,707	1,326	3,823	202,809	163,340,925	163,546,041
1972	4,074,554	2,966,140	131,219	17,898	527	1,670	151,314	70,766,414	70,895,538
1973	13,579,711	26,571,490	182,184	16,665	593	1,912	201,354	46,229,743	46,376,714
1974	2,942,492	4,410,634	182,026	17,657	347	1,152	201,182	24,711,569	25,071,788
1975	2,035,055	4,736,357	64,594	31,724	1,824	4,798	102,940	21,238,742	21,494,006
1976	1,412,659	6,411,534	157,000	41,944	6,228	10,410	215,582	20,368,310	21,082,773
1977	170,816	13,371,934	781,000	1,207,720	161,268	303,648	2,453,636	20,830,752	22,047,151
1978	126,553	28,875,413	47,000	2,678,659	189,509	490,027	3,405,195	37,298,830	38,791,460
1979	1,792,560	32,727,800	140,000	9,551,477	358,611	1,032,924	11,083,012	50,643,631	51,821,031
1980	2,189,290	19,760,840	481,000	27,617,657	2,300,148	7,206,505	37,605,310	68,295,509	73,636,095
1981	452,020	4,548,330	622,000	25,594,084	2,076,355	7,115,112	35,407,551	52,662,219	62,023,995
1982	970	244,440	133,000	5,087,000	518,000	1,451,000	7,189,000	20,144,696	22,372,696
1983	970	6,790	1,000	650,000	112,000	360,000	1,123,000	12,983,726	13,040,726
1984	970	5,820	1,000	327,000	33,000	81,000	442,000	19,349,929	19,349,929
1985	1,940	11,640	256,000	2,000	2,000	2,000	262,000	17,897,824	17,897,824
TOTAL	137,912,125	412,004,864	16,476,767	73,253,068	5,791,104	18,131,769	113,652,708	1,688,068,630	1,761,368,717

a) Includes excess capacity costs in the following years allocated to the Metropolitan Water District and repaid under Article 24(c) of their contract; 1970, \$362,000; 1971, \$6,198,000; 1972, \$139,000.

TABLE B-11: MINIMUM OMP&amp;R COSTS OF EACH AQUEDUCT REACH TO BE

(in dollars)

Sheet 1 of 8

Calendar Year	UPPER FEATHER DIVISION	NORTH BAY AQUEDUCT				SOUTH BAY AQUEDUCT			
		Reach 1	Reach 2	Reach 3	Total	Reach 1	Reach 2	Reach 4	Reach 5
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1960	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	37,398	5,526	0	0
1963	0	0	0	0	0	147,722	20,642	0	0
1964	0	0	0	0	0	149,761	15,580	19,407	0
1965	0	0	0	0	0	259,949	45,736	46,519	0
1966	0	0	0	0	0	271,421	23,860	64,088	0
1967	0	0	0	0	0	438,892	32,838	108,409	0
1968	0	0	0	0	0	402,671	42,993	65,628	0
1969	0	0	0	76,239	76,239	464,659	44,873	71,682	0
1970	0	0	0	88,805	88,805	366,702	42,629	62,379	63,747
1971	58	0	0	34,033	34,033	343,259	23,521	47,983	31,651
1972	40	0	0	32,888	32,888	332,842	28,311	54,237	92,928
1973	1	0	0	29,165	29,165	370,418	33,743	55,527	20,705
1974	145	0	0	41,576	41,576	439,433	54,731	82,081	51,865
1975	1,053	0	0	34,472	34,472	586,440	69,463	85,086	98,230
1976	209	0	0	34,144	34,144	462,032	75,694	76,754	176,358
1977	208	0	0	44,717	44,717	522,023	84,538	86,972	200,330
1978	207	0	0	50,415	50,415	535,202	86,274	91,241	208,743
1979	206	0	0	50,275	50,275	533,661	86,000	90,868	208,062
1980	206	0	0	69,066	69,066	533,118	85,979	90,977	208,027
1981	206	0	0	70,516	70,516	534,069	86,354	91,923	209,001
1982	207	114,588	24,063	67,847	206,498	538,330	86,896	92,398	210,292
1983	208	116,075	24,591	68,874	209,540	561,098	94,282	116,740	231,101
1984	206	114,286	24,126	68,196	206,608	555,681	93,194	115,250	228,391
1985	206	115,731	24,676	68,280	208,687	556,626	93,576	116,230	229,295
1986	207	115,166	24,405	68,416	207,987	556,535	93,394	115,118	228,617
1987	207	114,635	24,193	67,416	206,244	555,556	93,422	115,211	228,520
1988	207	115,216	24,453	67,331	207,000	554,595	93,011	114,137	227,298
1989	207	114,877	24,317	68,331	207,525	554,367	92,706	113,108	226,319
1990	207	115,723	24,656	68,331	208,710	554,391	92,739	113,218	226,119
1991	207	115,749	24,666	68,331	208,746	555,361	92,698	113,081	225,803
1992	207	115,363	24,538	67,254	207,155	553,543	92,402	112,366	224,863
1993	207	115,469	24,580	68,254	208,303	553,490	92,332	112,130	224,382
1994	207	115,347	24,532	67,254	207,133	553,331	92,120	111,413	224,115
1995	207	115,297	24,511	67,254	207,062	553,434	92,257	111,875	224,411
1996	206	115,386	24,517	67,344	207,247	553,956	92,026	110,764	223,750
1997	206	115,288	24,478	67,344	207,110	554,149	92,284	111,635	224,322
1998	206	114,155	24,424	67,344	205,923	553,010	92,098	111,004	223,568
1999	206	115,361	24,507	67,344	207,212	554,156	92,293	111,663	224,206
2000	208	116,054	24,662	68,707	209,423	557,425	92,920	112,458	225,643
2001	208	114,821	24,568	67,707	207,096	556,287	92,735	111,836	225,334
2002	208	115,996	24,638	67,707	208,341	557,290	92,739	111,848	225,502
2003	208	114,876	24,590	67,707	207,173	557,385	92,867	112,277	225,539
2004	208	114,848	24,579	67,707	207,134	556,346	92,815	112,103	225,349
2005	208	115,857	24,582	67,707	208,146	557,449	92,951	112,565	225,848
2006	208	115,838	24,575	67,707	208,120	557,496	93,014	112,778	225,976
2007	208	114,677	24,510	67,707	206,894	556,435	92,933	112,503	225,526
2008	208	115,793	24,557	67,707	208,057	557,516	93,041	112,867	225,985
2009	208	114,546	24,458	67,707	206,711	556,305	92,759	111,916	225,040
2010	208	117,144	25,097	67,707	209,948	557,622	93,182	113,344	226,277
2011	208	116,012	25,045	67,707	208,764	556,476	92,987	112,683	225,631
2012	208	115,744	24,938	67,707	208,389	556,367	92,841	112,193	225,271
2013	208	115,910	25,004	67,707	208,621	556,506	93,027	112,817	225,729
2014	208	115,909	25,003	67,707	208,619	556,489	93,004	112,745	225,675
2015	208	115,874	24,990	67,707	208,571	556,463	92,970	112,627	225,589
2016	208	115,907	25,002	67,707	208,616	557,446	92,947	112,551	225,533
2017	208	116,889	24,996	67,707	209,592	557,448	92,950	112,563	225,761
2018	208	115,856	24,982	67,707	208,545	557,443	92,943	112,535	225,522
2019	208	115,774	24,949	67,707	208,430	556,495	93,012	112,771	225,694
2020(a)	208	115,649	24,900	67,707	208,256	557,487	93,002	112,735	225,669

a) And each year thereafter for the remainder of the project repayment period.

# REIMBURSED THRU MINIMUM OMP&R COMPONENT OF TRANSPORTATION CHARGE

(in dollars)

Sheet 2 of 8

Calendar Year	SOUTH BAY AQUEDUCT (continued)					CALIFORNIA AQUEDUCT			
	Reach 6	Reach 7	Reach 8	Reach 9	Total	NORTH SAN JOAQUIN DIVISION			
						Reach 1	Reach 2A	Reach 2B	Subtotal
	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
1960	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	42,924	0	0	0	0
1963	0	0	0	0	168,364	0	0	0	0
1964	0	0	0	0	184,748	0	0	0	0
1965	2,634	6,490	4,704	12,904	378,936	0	0	0	0
1966	4,730	10,372	9,296	25,743	409,510	0	0	0	0
1967	2,734	7,735	10,908	34,573	636,089	2-	45-	8-	55-
1968	2,531	7,809	9,993	39,424	571,049	966,882	220,090	99,569	1,286,541
1969	2,383	5,548	8,263	35,713	633,121	903,789	290,709	181,377	1,375,875
1970	1,467	2,249-	6,559	26,412	567,646	938,746	296,281	146,589	1,381,616
1971	2,152	9,146	9,598	29,360	496,670	1,064,489	246,880	110,154	1,421,523
1972	4,065	9,996	11,695	42,892	576,966	1,071,168	223,532	106,631	1,401,331
1973	2,949	7,208	4,460	41,810	536,820	1,116,723	215,296	97,453	1,429,472
1974	6,578	8,189	5,007	47,150	695,034	1,236,407	226,897	114,914	1,578,218
1975	16,218	16,884	15,887	65,005	953,213	1,404,900	413,924	184,785	2,003,609
1976	6,978	9,220	8,469	47,242	862,747	1,777,946	339,779	146,524	2,264,249
1977	6,695	11,582	10,163	52,586	974,889	1,714,991	336,033	150,815	2,201,839
1978	6,924	12,297	10,951	55,591	1,007,223	1,739,615	333,805	152,271	2,225,691
1979	6,904	12,263	10,921	55,436	1,004,115	1,725,984	337,816	154,385	2,218,185
1980	6,898	12,252	10,912	55,388	1,003,551	1,723,419	334,090	152,471	2,209,980
1981	6,909	12,273	10,928	55,477	1,006,934	1,819,949	338,055	154,476	2,312,480
1982	6,957	12,354	11,002	55,852	1,014,081	1,830,429	335,298	152,919	2,318,646
1983	6,976	12,391	11,034	56,014	1,089,636	1,912,346	376,919	174,345	2,463,610
1984	6,901	12,257	10,915	55,409	1,077,998	1,895,179	365,566	168,702	2,429,447
1985	6,913	12,276	10,931	55,495	1,081,342	1,898,446	375,303	173,704	2,447,453
1986	6,929	12,307	10,959	55,631	1,079,490	1,894,695	383,069	177,642	2,455,406
1987	6,929	12,307	10,959	55,631	1,078,535	1,891,026	394,443	183,509	2,468,978
1988	6,919	12,287	10,943	55,546	1,074,736	1,889,105	385,161	178,751	2,453,017
1989	6,919	12,287	10,943	55,546	1,072,195	1,890,394	376,362	174,212	2,440,968
1990	6,919	12,287	10,943	55,546	1,072,162	1,891,285	379,818	175,995	2,447,098
1991	6,919	12,287	10,943	55,546	1,072,638	1,892,549	379,572	175,867	2,447,988
1992	6,908	12,270	10,927	55,468	1,068,747	1,886,666	383,332	177,837	2,447,835
1993	6,908	12,270	10,927	55,468	1,067,907	1,888,453	381,437	176,860	2,446,750
1994	6,908	12,270	10,927	55,468	1,066,552	1,887,054	379,829	176,029	2,442,912
1995	6,908	12,270	10,927	55,468	1,067,550	1,886,801	385,198	178,799	2,450,798
1996	6,920	12,290	10,946	55,559	1,066,211	1,888,338	378,018	175,062	2,441,418
1997	6,920	12,290	10,946	55,559	1,068,105	1,887,680	386,655	179,517	2,453,852
1998	6,920	12,290	10,946	55,559	1,065,395	1,885,724	386,203	179,283	2,451,210
1999	6,920	12,290	10,946	55,559	1,068,033	1,889,157	380,471	176,327	2,445,955
2000	6,966	12,372	11,017	55,927	1,074,728	1,900,887	383,988	178,011	2,462,886
2001	6,966	12,372	11,017	55,927	1,072,474	1,897,510	390,507	181,374	2,469,391
2002	6,966	12,372	11,017	55,927	1,073,661	1,900,376	385,816	178,953	2,465,145
2003	6,966	12,372	11,017	55,927	1,074,350	1,898,640	388,399	180,286	2,467,325
2004	6,966	12,372	11,017	55,927	1,072,895	1,898,619	388,116	180,140	2,466,875
2005	6,966	12,372	11,017	55,927	1,075,095	1,898,493	386,358	179,234	2,464,085
2006	6,966	12,372	11,017	55,927	1,075,546	1,899,262	388,144	180,155	2,467,561
2007	6,966	12,372	11,017	55,927	1,073,679	1,896,227	390,491	181,366	2,468,084
2008	6,966	12,372	11,017	55,927	1,075,691	1,899,372	389,652	180,931	2,469,955
2009	6,966	12,372	11,017	55,927	1,072,302	1,894,832	388,914	180,551	2,464,297
2010	6,966	12,372	11,017	55,927	1,076,707	1,899,890	387,952	180,055	2,467,897
2011	6,966	12,372	11,017	55,927	1,074,059	1,898,172	390,795	181,522	2,470,489
2012	6,966	12,372	11,017	55,927	1,072,954	1,895,067	392,176	182,235	2,469,478
2013	6,966	12,372	11,017	55,927	1,074,361	1,897,732	393,581	182,959	2,474,272
2014	6,966	12,372	11,017	55,927	1,074,195	1,898,256	391,951	182,118	2,472,325
2015	6,966	12,372	11,017	55,927	1,073,931	1,898,118	390,048	181,136	2,469,302
2016	6,966	12,372	11,017	55,927	1,074,759	1,898,630	388,243	180,206	2,467,079
2017	6,966	12,372	11,017	55,927	1,075,004	1,899,272	388,273	180,221	2,467,766
2018	6,966	12,372	11,017	55,927	1,074,725	1,898,630	388,255	180,212	2,467,097
2019	6,966	12,372	11,017	55,927	1,074,254	1,898,890	391,853	182,067	2,472,810
2020(a)	6,966	12,372	11,017	55,927	1,075,175	1,899,426	390,402	181,320	2,471,148

TABLE B-11: MINIMUM OMP&amp;R COSTS OF EACH AQUEDUCT REACH TO BE

(in dollars)

Sheet 3 of 8

Calendar Year	CALIFORNIA AQUEDUCT (continued)								
	SAN LUIS DIVISION						SOUTH SAN JOAQUIN DIVISION		
	Reach 3	Reach 4	Reach 5	Reach 6	Reach 7	Subtotal	Reach 8C	Reach 8D	Reach 9
	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
1960	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0
1968	117,509	414,586	126,486	43,371	100,903	802,855	0	0	0
1969	89,450	450,260	180,104	35,417	227,897	983,128	20,944	128,464	82,250
1970	88,601	468,684	217,914	63,803	185,262	1,024,264	25,069	150,538	123,346
1971	97,156	524,202	169,995	62,123	152,486	1,005,962	30,808	182,648	113,634
1972	113,952	628,728	169,585	71,417	149,746	1,133,428	33,446	178,643	124,519
1973	114,754	597,621	154,940	57,000	149,706	1,074,021	49,032	216,290	122,008
1974	118,281	658,220	148,974	62,908	147,812	1,136,195	33,332	190,799	126,342
1975	141,118	825,706	177,030	78,777	160,491	1,383,122	67,991	237,151	155,788
1976	176,187	856,890	179,771	52,201	122,647	1,387,696	52,385	239,349	149,593
1977	184,052	914,647	191,564	60,338	128,105	1,478,706	52,333	216,019	140,241
1978	188,770	923,151	192,184	64,670	129,081	1,497,856	53,105	221,246	144,002
1979	190,924	916,064	195,232	65,616	130,066	1,497,902	52,981	222,145	145,357
1980	188,508	916,491	192,702	64,788	128,966	1,491,455	52,873	220,821	144,128
1981	191,218	923,747	195,648	65,738	130,273	1,506,624	53,023	222,512	145,608
1982	190,400	932,878	193,474	65,076	129,915	1,511,743	53,326	221,851	144,550
1983	216,737	1,120,978	252,898	84,357	154,616	1,829,586	54,265	248,929	170,159
1984	208,207	1,108,390	242,176	80,813	149,367	1,788,953	53,578	243,206	165,432
1985	214,488	1,118,466	253,644	84,554	154,235	1,825,387	53,837	248,494	170,365
1986	219,646	1,104,442	252,245	83,820	153,254	1,813,407	53,986	251,534	173,093
1987	226,732	1,102,332	261,662	86,829	157,045	1,834,600	54,128	256,344	177,676
1988	220,745	1,099,319	255,293	84,789	154,363	1,814,509	53,955	252,969	174,564
1989	215,261	1,099,061	249,306	82,875	151,953	1,798,456	53,866	249,911	171,650
1990	217,415	1,102,693	253,380	84,176	153,593	1,811,257	53,928	251,990	173,633
1991	217,262	1,104,820	253,785	84,305	153,756	1,813,928	53,933	252,198	173,829
1992	219,417	1,098,379	256,028	85,015	154,553	1,813,392	53,899	253,234	174,911
1993	218,236	1,101,701	255,438	84,826	154,316	1,814,517	53,889	252,932	174,623
1994	217,233	1,097,689	253,591	84,235	153,573	1,806,321	53,861	251,988	173,724
1995	220,578	1,099,609	257,883	85,608	155,300	1,818,978	53,926	254,182	175,812
1996	216,325	1,095,644	252,189	83,797	153,134	1,801,089	53,921	251,402	173,055
1997	221,706	1,098,420	259,170	86,028	155,944	1,821,268	54,025	254,967	176,452
1998	221,423	1,093,972	258,067	85,675	155,500	1,814,637	54,009	254,404	175,915
1999	217,852	1,098,883	254,269	84,461	153,971	1,809,436	53,952	252,465	174,067
2000	220,929	1,108,951	257,915	85,657	155,941	1,829,393	54,331	254,846	175,897
2001	224,989	1,105,472	262,471	87,113	157,776	1,837,821	54,399	257,174	178,114
2002	222,067	1,108,900	259,240	86,080	156,475	1,832,762	54,351	255,523	176,542
2003	223,676	1,106,261	260,861	86,598	157,127	1,834,523	54,375	256,351	177,330
2004	223,501	1,105,051	260,439	86,462	156,957	1,832,410	54,369	256,135	177,125
2005	222,404	1,104,988	258,945	85,986	156,356	1,828,679	54,346	255,371	176,397
2006	223,518	1,106,987	260,555	86,501	157,004	1,834,565	54,371	256,194	177,181
2007	224,981	1,103,142	261,761	86,886	157,489	1,834,259	54,389	256,811	177,768
2008	224,456	1,108,006	262,091	86,992	157,622	1,839,167	54,394	256,980	177,928
2009	223,997	1,098,401	260,215	86,392	156,866	1,825,871	54,366	256,021	177,016
2010	223,397	1,108,134	260,883	86,606	157,136	1,836,156	54,376	256,362	177,340
2011	225,170	1,106,778	263,037	87,294	158,004	1,840,283	54,408	257,463	178,389
2012	226,029	1,100,415	263,250	87,362	158,088	1,835,144	54,412	257,572	178,493
2013	226,903	1,106,414	265,289	88,013	158,909	1,845,528	54,442	258,613	179,485
2014	225,888	1,106,447	263,939	87,582	158,366	1,842,222	54,422	257,924	178,828
2015	224,704	1,106,089	262,001	86,962	157,586	1,837,342	54,393	256,933	177,885
2016	223,581	1,107,245	260,945	86,626	157,160	1,835,557	54,377	256,394	177,370
2017	223,598	1,107,449	261,251	86,723	157,284	1,836,305	54,381	256,551	177,520
2018	223,588	1,107,214	260,896	86,609	157,142	1,835,449	54,376	256,369	177,347
2019	225,829	1,108,913	264,857	87,876	158,735	1,846,210	54,436	258,392	179,274
2020 (a)	224,925	1,108,789	263,269	87,368	158,097	1,842,448	54,411	257,581	178,502

# REIMBURSED THRU MINIMUM OMP&R COMPONENT OF TRANSPORTATION CHARGE

(in dollars)

Sheet 4 of 8

Calendar Year	CALIFORNIA AQUEDUCT (continued)								
	SOUTH SAN JOAQUIN DIVISION (continued)								
	Reach 10A	Reach 11B	Reach 12D	Reach 12E	Reach 13B	Reach 14A	Reach 14B	Reach 14C	Reach 15A
	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)
1960	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0
1969	79,902	56,485	0	0	0	0	0	0	0
1970	113,445	82,508	90,956	117,955	146,561	0	0	0	0
1971	124,540	77,014	91,542	86,893	160,235	666,301	146,789	107,779	508,825
1972	112,064	80,373	94,426	109,117	139,461	840,125	119,869	97,321	580,695
1973	112,403	88,291	71,015	108,636	212,329	924,450	115,830	95,822	661,478
1974	135,636	94,228	72,011	185,953	135,714	862,070	140,212	111,704	818,358
1975	193,719	118,143	68,963	121,181	120,587	1,084,391	169,088	116,616	939,715
1976	183,921	134,657	104,304	137,586	200,027	1,169,086	152,294	108,788	1,059,870
1977	155,580	110,734	99,647	117,500	188,266	1,070,699	142,631	109,972	961,092
1978	159,383	113,759	101,816	120,212	191,876	1,079,266	146,454	112,728	971,920
1979	160,819	114,431	103,819	120,701	192,930	1,076,767	148,074	113,331	967,227
1980	159,506	113,677	102,303	120,068	191,771	1,075,460	146,885	113,027	966,679
1981	161,088	114,583	104,072	120,874	193,208	1,080,011	148,703	114,316	970,217
1982	160,011	114,158	102,175	120,670	192,619	1,084,725	147,494	113,587	975,772
1983	187,300	129,408	135,118	133,674	216,529	1,212,741	194,948	146,095	1,035,626
1984	182,198	126,294	129,916	130,775	211,510	1,200,146	190,195	142,701	1,028,390
1985	187,464	129,274	136,172	133,341	216,179	1,212,287	197,323	147,608	1,030,997
1986	190,389	130,935	139,515	134,800	218,848	1,211,718	200,253	149,627	1,028,574
1987	195,269	133,648	145,453	137,102	223,096	1,213,664	204,236	152,352	1,026,687
1988	191,944	131,763	141,553	135,465	220,121	1,209,839	201,659	150,568	1,025,796
1989	188,841	130,037	137,775	134,002	217,420	1,207,615	198,786	148,601	1,026,399
1990	190,951	131,211	140,345	134,997	219,257	1,212,010	201,879	150,719	1,028,231
1991	191,161	131,327	140,600	135,097	219,440	1,213,167	202,042	150,828	1,028,243
1992	192,303	131,928	142,119	135,573	220,358	1,211,945	203,186	151,597	1,025,643
1993	191,998	131,757	141,745	135,428	220,092	1,212,758	203,103	151,540	1,026,605
1994	191,041	131,225	140,582	134,977	219,259	1,209,134	201,207	150,242	1,025,085
1995	193,265	132,462	143,288	136,027	221,194	1,212,384	204,147	152,254	1,025,867
1996	190,339	130,876	139,576	134,721	218,737	1,210,198	201,795	150,662	1,026,557
1997	193,957	132,887	143,978	136,427	221,885	1,212,605	204,142	152,269	1,026,042
1998	193,386	132,571	143,282	136,157	221,387	1,210,313	203,835	152,061	1,025,231
1999	191,417	131,475	140,887	135,228	219,674	1,211,269	202,548	151,178	1,027,021
2000	193,405	132,746	142,698	136,461	221,757	1,220,959	205,433	153,237	1,032,655
2001	195,768	134,059	145,571	137,576	223,813	1,218,981	206,002	153,627	1,030,721
2002	194,094	133,129	143,533	136,786	222,356	1,219,350	204,955	152,910	1,032,546
2003	194,933	133,596	144,555	137,183	223,086	1,220,172	206,187	153,754	1,031,674
2004	194,714	133,474	144,288	137,079	222,896	1,219,538	205,741	153,448	1,031,536
2005	193,939	133,043	143,347	136,714	222,222	1,218,343	204,901	152,872	1,031,364
2006	194,773	133,507	144,362	137,108	222,948	1,219,441	205,674	153,401	1,031,555
2007	195,399	133,854	145,122	137,402	223,492	1,217,656	205,725	153,438	1,030,499
2008	195,570	133,950	145,331	137,483	223,642	1,220,561	206,461	153,941	1,031,700
2009	194,598	133,409	144,149	137,024	222,795	1,214,550	204,193	152,388	1,029,324
2010	194,944	133,603	144,569	137,188	223,096	1,220,469	205,742	153,450	1,032,706
2011	196,061	134,223	145,929	137,714	224,068	1,221,999	207,474	154,633	1,031,991
2012	196,170	134,285	146,063	137,767	224,165	1,218,101	206,692	154,099	1,029,777
2013	197,227	134,871	147,348	138,265	225,083	1,222,308	208,345	155,230	1,031,153
2014	196,528	134,482	146,497	137,935	224,475	1,221,315	207,645	154,752	1,031,085
2015	195,524	133,925	145,274	137,462	223,602	1,219,616	206,449	153,933	1,030,757
2016	194,975	133,619	144,608	137,203	223,124	1,220,061	206,109	153,700	1,031,667
2017	195,135	133,708	144,802	137,278	223,262	1,220,256	206,247	153,794	1,031,748
2018	194,951	133,606	144,577	137,191	223,102	1,219,917	206,009	153,633	1,031,986
2019	197,003	134,746	147,075	138,159	224,888	1,225,328	209,817	156,238	1,032,889
2020(a)	196,181	134,289	146,074	137,771	224,174	1,223,346	208,420	155,281	1,032,479

TABLE B-11: MINIMUM OMP&amp;R COSTS OF EACH AQUEDUCT REACH TO BE

(in dollars)

Sheet 5 of 8

Calendar Year	CALIFORNIA AQUEDUCT (continued)								
	SOUTH SAN JOAQUIN DIVISION (continued)		TEHACHAPI DIVISION			MOJAVE DIVISION			
	Reach 16A	Subtotal	Reach 17E	Reach 17F	Subtotal	Reach 18A	Reach 19	Reach 19C	Reach 20A
	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)	(45)
1960	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0
1969	0	368,045	0	0	0	0	0	0	0
1970	0	850,378	0	0	0	0	0	0	0
1971	0	2,297,008	0	0	0	0	0	0	0
1972	1,056,615	3,566,674	1,359,918	26,705	1,386,623	35,230	129,898	0	124,404
1973	1,192,290	3,969,874	1,704,119	49,149	1,753,268	32,483	132,907	0	146,463
1974	1,288,845	4,195,204	2,206,290	17,131	2,223,421	28,481	82,535	0	106,285
1975	1,451,627	4,844,960	2,322,533	35,254	2,357,787	38,092	117,105	0	133,624
1976	1,745,428	5,437,288	2,548,352	38,892	2,587,244	69,934	226,137	0	227,733
1977	1,566,656	4,931,370	2,650,609	35,915	2,686,524	105,172	254,239	0	252,660
1978	1,583,852	4,999,619	2,861,580	38,203	2,899,783	116,822	268,227	0	259,437
1979	1,576,347	4,995,429	2,849,966	37,983	2,887,949	115,063	265,980	0	257,467
1980	1,575,440	4,982,638	2,856,949	38,001	2,894,950	121,107	267,592	0	258,987
1981	1,580,629	5,008,844	2,867,944	38,221	2,906,165	150,007	270,487	0	261,737
1982	1,587,929	5,018,867	2,890,328	38,452	2,928,780	144,706	270,768	0	262,039
1983	1,719,052	5,583,844	3,037,688	47,894	3,085,582	191,102	494,313	0	473,835
1984	1,712,064	5,516,405	3,006,396	48,026	3,054,422	189,500	504,700	0	483,617
1985	1,717,526	5,580,867	2,997,364	48,168	3,045,532	190,156	508,610	0	487,329
1986	1,712,640	5,595,912	2,986,652	48,428	3,035,080	191,567	514,883	41,369	493,283
1987	1,713,276	5,632,931	2,978,291	48,314	3,026,605	191,207	513,172	41,369	491,663
1988	1,710,775	5,600,971	2,977,869	48,618	3,026,487	192,387	519,192	41,304	497,357
1989	1,711,839	5,576,742	2,981,585	48,939	3,030,524	194,128	527,463	41,304	505,192
1990	1,717,715	5,606,866	2,982,514	49,021	3,031,535	194,670	530,041	41,304	507,636
1991	1,718,515	5,610,380	2,984,372	48,977	3,033,349	194,242	528,005	41,304	505,707
1992	1,715,399	5,612,095	2,974,948	49,117	3,024,065	195,189	532,869	41,244	510,311
1993	1,716,714	5,613,184	2,978,664	49,187	3,027,851	195,563	534,644	41,244	511,992
1994	1,712,986	5,595,311	2,975,877	49,320	3,025,197	196,020	536,819	41,244	514,051
1995	1,716,559	5,621,367	2,974,948	49,269	3,024,217	195,983	536,642	41,244	513,886
1996	1,717,229	5,599,068	2,976,506	49,704	3,026,210	198,018	545,874	41,314	522,639
1997	1,714,903	5,624,539	2,974,648	49,002	3,023,650	194,403	528,700	41,314	506,367
1998	1,714,129	5,616,680	2,970,932	49,264	3,020,196	194,719	534,607	41,314	511,964
1999	1,718,926	5,610,107	2,978,364	49,592	3,027,956	197,426	543,058	41,314	519,968
2000	1,727,563	5,651,988	2,993,009	49,774	3,042,783	197,697	542,599	41,587	519,575
2001	1,723,271	5,659,076	2,986,506	49,429	3,035,935	195,021	534,293	41,587	511,705
2002	1,727,146	5,653,221	2,992,080	49,742	3,041,822	197,527	541,776	41,587	518,794
2003	1,724,472	5,657,668	2,988,364	49,897	3,038,261	197,541	546,269	41,587	523,049
2004	1,725,745	5,656,088	2,987,435	49,908	3,037,343	197,345	545,338	41,587	522,167
2005	1,725,209	5,648,068	2,988,364	49,882	3,038,246	198,311	545,511	41,587	522,331
2006	1,725,578	5,656,093	2,989,293	49,851	3,039,144	197,984	543,961	41,587	520,863
2007	1,722,336	5,653,891	2,984,648	49,572	3,034,220	195,774	537,873	41,587	515,095
2008	1,725,886	5,663,827	2,989,293	49,834	3,039,127	198,160	544,790	41,587	521,649
2009	1,719,588	5,639,421	2,980,932	49,690	3,030,622	196,226	540,011	41,587	517,120
2010	1,726,994	5,660,839	2,990,222	49,826	3,040,048	197,775	542,963	41,587	519,919
2011	1,725,727	5,670,079	2,987,435	50,052	3,037,487	198,486	550,751	41,587	527,298
2012	1,722,396	5,659,992	2,980,932	49,746	3,030,678	196,678	542,164	41,587	519,160
2013	1,726,407	5,678,777	2,985,577	50,011	3,035,588	197,896	547,953	41,587	524,644
2014	1,726,286	5,672,174	2,986,506	50,029	3,036,535	197,904	547,986	41,587	524,676
2015	1,726,043	5,661,796	2,987,435	49,940	3,037,375	197,482	545,982	41,587	522,779
2016	1,726,359	5,659,566	2,989,293	50,032	3,039,325	198,053	548,697	41,587	525,350
2017	1,726,542	5,661,224	2,989,293	50,026	3,039,319	199,264	550,029	41,587	526,611
2018	1,727,267	5,660,331	2,989,293	50,056	3,039,349	198,064	548,735	41,587	525,385
2019	1,730,828	5,689,073	2,988,364	50,396	3,038,760	199,802	557,005	41,587	533,218
2020(a)	1,728,743	5,677,252	2,989,293	50,116	3,039,409	198,498	550,803	41,587	527,344



# REIMBURSED THRU MINIMUM OMP&R COMPONENT OF TRANSPORTATION CHARGE

(in dollars)

Sheet 6 of 8

Calendar Year	CALIFORNIA AQUEDUCT (continued)								
	MOJAVE DIVISION (continued)							SANTA ANA DIVISION	
	Reach 20B	Reach 21	Reach 22A	Reach 22B	Reach 23	Reach 24	Subtotal	Reach 25	Reach 26A
	(46)	(47)	(48)	(49)	(50)	(51)	(52)	(53)	(54)
1960	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0
1972	114,112	72,412	76,761	1,000,006	48,265	351,702	1,952,790	0	0
1973	134,624	54,279	60,223	1,323,279	59,944	323,253	2,267,455	19,564	634,221
1974	80,895	60,117	71,285	1,505,230	89,078	301,789	2,325,695	23,031	749,307
1975	112,869	117,054	75,473	1,643,880	102,501	394,536	2,735,134	28,151	835,892
1976	196,291	110,273	89,055	1,562,297	61,430	622,883	3,166,033	15,666	1,025,322
1977	218,880	126,305	104,758	1,667,829	67,732	470,445	3,268,020	23,289	897,339
1978	205,016	149,187	112,616	1,685,947	61,694	662,344	3,521,290	24,543	890,480
1979	203,295	148,086	112,009	1,670,177	61,800	868,226	3,702,103	24,441	886,390
1980	204,661	148,828	112,234	1,679,341	61,406	551,151	3,405,307	24,390	885,608
1981	207,069	150,235	112,894	1,693,366	61,533	714,180	3,621,508	24,458	887,676
1982	207,163	150,521	113,378	1,704,935	61,956	592,472	3,507,938	24,631	893,703
1983	395,350	256,475	154,746	2,545,971	62,139	1,129,674	5,703,605	24,706	924,700
1984	404,327	261,148	155,960	2,576,333	61,456	2,034,883	6,671,924	24,427	917,410
1985	407,590	263,053	156,800	2,579,186	61,584	574,817	5,229,125	24,495	918,612
1986	412,812	266,050	158,068	2,573,492	61,677	2,083,695	6,796,896	24,499	917,635
1987	411,370	265,237	157,755	2,566,789	61,677	785,364	5,485,603	24,499	915,777
1988	416,471	268,058	158,763	2,580,682	61,582	1,516,679	6,252,475	24,461	915,538
1989	423,437	271,975	160,288	2,611,558	61,582	34,126	4,831,053	24,461	916,467
1990	425,608	273,196	160,762	2,611,339	61,582	2,573,663	7,379,801	24,461	916,467
1991	423,892	272,228	160,387	2,614,345	61,582	396,249	5,197,941	24,461	916,467
1992	428,020	274,500	161,197	2,613,953	61,494	1,452,752	6,271,529	24,426	914,477
1993	429,513	275,342	161,522	2,625,131	61,494	298,299	5,134,744	24,426	915,406
1994	431,346	276,372	161,924	2,624,699	61,494	1,500,573	6,344,542	24,426	914,477
1995	431,198	276,291	161,891	2,621,112	61,494	1,959,985	6,799,726	24,426	914,477
1996	438,937	280,701	163,696	2,645,879	61,597	1,137,520	6,036,175	24,468	915,718
1997	424,473	272,566	160,531	2,597,707	61,597	1,456,901	6,244,559	24,468	914,789
1998	429,450	275,364	161,622	2,606,133	61,597	630,424	5,447,194	24,468	913,860
1999	436,565	279,368	163,178	2,641,079	61,597	923,633	5,807,186	24,468	915,718
2000	436,039	279,297	163,509	2,645,221	62,005	1,532,636	6,420,165	24,629	920,710
2001	429,046	275,362	161,981	2,612,521	62,005	1,635,871	6,459,392	24,629	919,781
2002	435,347	278,907	163,358	2,645,456	62,005	88,451	4,796,306	24,629	920,710
2003	439,130	281,035	164,185	2,648,522	62,005	1,161,494	6,064,817	24,629	919,781
2004	438,347	280,595	164,016	2,645,008	62,005	1,098,649	5,995,057	24,629	919,781
2005	438,493	280,677	164,045	2,646,972	62,005	1,103,201	6,003,133	24,629	919,781
2006	437,186	279,939	163,760	2,641,989	62,005	1,782,437	6,671,711	24,629	919,781
2007	432,059	277,055	162,639	2,619,772	62,005	812,853	5,656,712	24,629	918,852
2008	437,885	280,332	163,915	2,644,265	62,005	1,486,808	6,381,396	24,629	919,781
2009	433,861	278,071	163,032	2,621,500	62,005	491,662	5,345,075	24,629	918,852
2010	436,348	279,469	163,577	2,641,390	62,005	1,557,021	6,442,054	24,629	919,781
2011	442,907	283,158	165,010	2,658,436	62,005	982,955	5,912,593	24,629	919,781
2012	435,672	279,091	163,430	2,625,534	62,005	1,165,765	6,031,086	24,629	918,852
2013	440,548	281,831	164,496	2,647,661	62,005	1,175,379	6,084,000	24,629	919,781
2014	440,575	281,848	164,502	2,648,811	62,005	1,182,802	6,092,696	24,629	919,781
2015	438,890	280,898	164,135	2,645,366	62,005	1,134,166	6,033,290	24,629	919,781
2016	441,176	282,184	164,634	2,654,053	62,005	1,048,741	5,966,480	24,629	919,781
2017	442,298	282,816	164,877	2,657,643	62,005	1,166,863	6,093,993	24,629	919,781
2018	441,208	282,204	164,639	2,654,353	62,005	1,195,355	6,113,535	24,629	919,781
2019	448,169	286,119	166,162	2,676,414	62,005	270,643	4,699,838	24,629	919,781
2020(a)	442,948	283,182	165,020	2,658,655	62,005	1,174,363	6,104,405	24,629	919,781

TABLE B-11: MINIMUM OMP&amp;R COSTS OF EACH AQUEDUCT REACH TO BE

(in dollars)

Sheet 7 of 8

Calendar Year	CALIFORNIA AQUEDUCT (continued)								
	SANTA ANA DIVISION (continued)				WEST BRANCH				
	Reach 28G	Reach 28H	Reach 28J	Subtotal	Reach 29A	Reach 29F	Reach 29G	Reach 29H	Reach 29J
	(55)	(56)	(57)	(58)	(59)	(60)	(61)	(62)	(63)
1960	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	689,482	151,022	196,480	234,732	87,874
1973	126,836	32,475	815,196	780,621	750,619	327,968	119,195	269,677	123,452
1974	144,924	61,092	770,176	1,764,933	850,306	155,644	108,812	201,653	31,636
1975	119,074	61,092	770,176	1,814,385	986,638	180,382	167,579	735,296	153,563
1976	138,397	44,695	705,927	1,930,007	1,416,864	229,996	363,699	331,220	168,109
1977	137,002	39,808	439,466	1,536,904	1,194,934	219,626	390,536	373,565	158,413
1978	138,076	38,876	656,348	1,748,323	1,287,877	175,133	377,419	448,235	157,035
1979	137,624	38,704	650,678	1,737,837	1,282,632	172,446	368,619	444,796	156,496
1980	137,474	38,641	475,906	1,562,019	1,281,808	163,202	362,304	441,617	153,215
1981	137,695	38,732	764,022	1,852,583	1,284,928	162,326	610,738	423,172	153,228
1982	138,634	39,001	418,815	1,514,784	1,293,868	162,864	897,556	424,749	152,947
1983	139,039	39,116	102,623	1,024,938	1,357,844	321,779	983,169	767,794	154,155
1984	137,524	38,683	2,467,659	3,585,703	1,347,262	327,831	977,290	771,885	156,828
1985	137,769	38,775	848,497	1,968,148	1,349,274	328,735	980,856	786,462	158,864
1986	138,055	38,811	353,580	1,472,580	1,350,104	332,619	982,081	800,363	159,969
1987	138,055	38,811	1,116,951	2,234,093	1,348,202	332,392	979,710	797,319	161,827
1988	137,841	38,752	2,802,041	3,918,633	1,348,385	337,674	983,429	820,082	162,609
1989	137,841	38,752	693,406	1,810,927	1,350,768	344,946	988,887	846,780	169,112
1990	137,841	38,752	2,642,162	3,759,683	1,351,230	347,245	988,721	845,800	169,112
1991	137,841	38,752	1,271,045	2,388,566	1,351,265	347,435	989,590	850,937	170,970
1992	137,645	38,697	1,611,507	2,726,752	1,349,549	351,700	989,426	861,166	174,552
1993	137,645	38,697	1,093,823	2,209,997	1,350,697	352,790	992,274	872,488	172,694
1994	137,645	38,697	1,372,181	2,487,426	1,350,055	354,227	991,902	875,773	174,552
1995	137,645	38,697	2,166,644	3,281,889	1,349,928	353,591	992,431	878,896	174,552
1996	137,874	38,761	1,509,460	2,626,281	1,353,251	360,629	998,644	908,852	177,495
1997	137,874	38,761	980,095	2,095,987	1,349,973	348,885	991,417	871,703	178,424
1998	137,874	38,761	1,882,544	2,997,507	1,350,159	354,460	993,585	889,964	178,424
1999	137,874	38,761	1,469,900	2,586,721	1,352,983	359,289	998,219	906,335	180,282
2000	138,788	39,017	1,469,379	2,592,523	1,360,792	359,804	1,004,256	915,093	180,912
2001	138,788	39,017	1,336,696	2,458,911	1,358,650	353,739	999,517	892,613	179,983
2002	138,788	39,017	813,669	1,936,813	1,360,655	359,119	1,004,478	916,398	181,841
2003	138,788	39,017	1,472,803	2,595,018	1,360,259	361,785	1,005,797	929,659	183,699
2004	138,788	39,017	1,389,134	2,511,349	1,360,254	361,767	1,004,592	922,541	182,770
2005	138,788	39,017	1,396,262	2,518,477	1,360,184	361,412	1,005,737	929,292	183,699
2006	138,788	39,017	1,454,033	2,576,248	1,360,022	360,600	1,004,709	923,238	182,770
2007	138,788	39,017	1,429,529	2,550,815	1,358,097	355,617	1,001,333	908,801	183,699
2008	138,788	39,017	1,462,825	2,585,040	1,360,121	361,095	1,005,201	926,144	184,628
2009	138,788	39,017	1,444,433	2,565,719	1,358,516	357,717	1,003,186	919,731	186,486
2010	138,788	39,017	1,452,207	2,574,422	1,360,240	361,688	1,005,915	930,357	184,628
2011	138,788	39,017	1,466,366	2,588,581	1,360,849	364,733	1,008,137	943,469	185,557
2012	138,788	39,017	1,425,288	2,546,574	1,358,804	359,157	1,004,011	924,623	186,486
2013	138,788	39,017	1,452,080	2,574,295	1,360,812	364,554	1,008,358	944,763	185,557
2014	138,788	39,017	1,455,464	2,577,679	1,360,698	363,975	1,008,123	943,389	186,486
2015	138,788	39,017	1,441,462	2,563,677	1,360,377	362,377	1,007,751	941,177	184,628
2016	138,788	39,017	1,455,027	2,577,242	1,360,721	364,093	1,008,334	944,620	185,557
2017	138,788	39,017	1,422,012	2,544,227	1,360,850	364,749	1,009,147	949,429	185,557
2018	138,788	39,017	1,099,374	2,221,589	1,360,779	364,402	1,008,220	943,964	186,486
2019	138,788	39,017	1,454,902	2,577,117	1,361,814	369,562	1,010,133	955,248	184,628
2020 (a)	138,788	39,017	1,472,113	2,594,328	1,360,966	365,325	1,008,901	947,983	186,486

# REIMBURSED THRU MINIMUM OMP&R COMPONENT OF TRANSPORTATION CHARGE

(in dollars)

Sheet 8 of 8

Calendar Year	CALIFORNIA AQUEDUCT (continued)								GRAND TOTAL
	WEST BRANCH (continued)		COASTAL BRANCH					TOTAL	
	Reach 30	Subtotal	Reach 31A <sup>(b)</sup>	Reach 33A	Reach 34	Reach 35	Subtotal		
	(64)	(65)	(66)	(67)	(68)	(69)	(70)	(71)	(72)
1960	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	42,924
1963	0	0	0	0	0	0	0	0	168,364
1964	0	0	0	0	0	0	0	0	184,748
1965	0	0	0	0	0	0	0	0	378,936
1966	0	0	0	0	0	0	0	0	409,510
1967	0	0	0	0	0	0	0	55	636,034
1968	0	0	0	0	0	0	0	2,089,396	2,660,445
1969	0	0	507,618	0	0	0	507,618	3,234,666	3,944,026
1970	0	0	609,713	0	0	0	609,713	3,865,971	4,522,422
1971	0	0	698,156	0	0	0	698,156	5,422,649	5,953,410
1972	395,810	1,755,400	696,084	0	0	0	696,084	11,892,330	12,502,224
1973	574,803	2,165,714	641,677	0	0	0	641,677	14,082,102	14,648,088
1974	691,002	2,039,053	671,875	0	0	0	671,875	15,934,594	16,671,349
1975	829,692	3,052,150	786,134	0	0	0	786,134	18,977,281	19,966,019
1976	1,024,552	3,534,440	755,873	0	0	0	755,873	21,062,830	21,959,930
1977	773,606	3,110,680	709,003	0	0	0	709,003	19,923,046	20,942,860
1978	865,618	3,311,317	760,171	0	0	0	760,171	20,964,050	22,021,895
1979	771,871	3,196,860	758,755	0	0	0	758,755	20,995,020	22,049,616
1980	774,754	3,176,900	759,617	0	0	0	759,617	20,482,866	21,555,689
1981	751,273	3,385,665	762,817	0	0	0	762,817	21,356,686	22,434,342
1982	777,991	3,709,975	765,002	229,714	27,195	57,826	1,079,737	21,590,470	22,811,256
1983	971,551	4,556,292	822,481	270,698	46,704	94,690	1,234,573	25,482,030	26,781,414
1984	1,427,347	5,008,443	814,961	272,205	50,652	101,774	1,239,592	29,294,889	30,579,701
1985	1,173,845	4,778,036	818,656	260,841	43,273	86,899	1,209,669	26,084,217	27,374,452
1986	798,216	4,423,352	816,377	253,436	38,482	77,380	1,185,675	26,778,308	28,065,992
1987	1,626,054	5,245,504	815,682	253,624	39,330	79,076	1,187,712	27,116,026	28,401,012
1988	1,349,466	5,001,645	814,599	254,948	40,401	81,219	1,191,167	29,258,904	30,540,847
1989	1,698,658	5,399,151	813,001	249,034	36,175	72,768	1,170,978	26,058,799	27,338,726
1990	364,949	4,067,057	816,354	251,735	38,107	76,626	1,182,822	29,286,119	30,567,198
1991	1,437,320	5,147,517	816,514	252,248	37,758	75,930	1,182,450	26,822,119	28,103,710
1992	2,294,936	6,021,329	814,603	249,627	36,715	73,841	1,174,786	29,091,783	30,367,892
1993	673,005	4,413,948	815,700	249,489	36,616	73,645	1,175,450	25,836,441	27,112,858
1994	740,654	4,487,163	813,931	248,120	36,638	71,687	1,169,376	27,358,248	28,632,140
1995	2,227,259	5,976,657	814,863	253,039	39,152	78,715	1,185,769	30,159,401	31,434,220
1996	637,743	4,436,614	814,288	252,054	38,316	77,041	1,181,699	27,148,554	28,422,218
1997	1,988,611	5,729,013	815,384	251,959	38,247	76,910	1,182,500	28,175,368	29,450,789
1998	1,570,394	5,336,986	813,744	245,975	36,831	74,077	1,170,627	27,855,037	29,126,561
1999	844,910	4,642,018	815,454	251,273	37,757	75,930	1,180,414	27,109,793	28,385,244
2000	2,524,109	6,344,966	820,340	252,301	37,961	76,335	1,186,937	29,531,641	30,816,000
2001	932,634	4,717,136	818,727	246,250	36,496	73,404	1,174,877	27,812,539	29,092,317
2002	774,666	4,597,157	820,407	251,284	37,234	74,879	1,183,804	25,507,030	26,789,240
2003	1,452,352	5,293,551	819,448	247,433	36,626	73,666	1,177,173	28,128,336	29,410,067
2004	1,100,108	4,932,032	819,190	245,043	35,632	71,680	1,171,545	27,602,699	28,882,936
2005	1,475,594	5,315,918	818,852	249,160	35,717	71,847	1,175,576	27,992,182	29,275,631
2006	2,038,783	5,870,122	819,271	249,160	35,716	71,843	1,175,990	29,291,434	30,575,308
2007	1,553,429	5,360,976	818,132	243,996	34,886	70,184	1,167,198	27,726,155	29,006,936
2008	859,552	4,696,741	819,632	249,087	35,665	71,742	1,176,126	27,851,379	29,135,335
2009	2,124,610	5,950,246	817,485	243,159	34,287	68,989	1,163,920	27,985,171	29,264,392
2010	843,937	4,686,765	820,465	249,472	35,939	72,290	1,178,166	27,886,347	29,173,210
2011	1,378,490	5,241,235	819,771	244,566	35,292	70,998	1,170,627	27,931,374	29,214,405
2012	850,609	4,683,690	818,224	243,158	34,286	68,987	1,164,655	27,421,297	28,702,848
2013	1,133,877	4,997,921	819,148	244,371	35,152	70,720	1,169,391	27,859,772	29,142,962
2014	935,120	4,797,791	819,905	244,579	35,302	71,017	1,170,803	27,662,225	28,945,247
2015	2,314,345	6,170,655	819,454	244,452	35,211	70,833	1,169,950	28,943,387	30,226,097
2016	1,193,777	5,057,102	819,359	245,631	35,337	71,090	1,171,417	27,773,768	29,057,351
2017	1,681,259	5,550,991	819,462	248,818	35,472	71,359	1,175,111	28,368,936	29,653,740
2018	1,872,558	5,736,409	819,348	245,641	35,346	71,105	1,171,440	28,245,199	29,528,677
2019	3,771,357	110,028	820,242	244,596	35,315	71,041	1,171,194	21,605,030	22,887,922
2020(a)	1,477,071	5,346,732	819,947	245,896	35,527	71,472	1,172,842	28,248,564	29,532,203

b) Includes certain costs to be assigned directly to Kern County Water Agency.  
Refer to Appendix B text "Project Water Charges, Minimum OMP&R Components".

TABLE B-12: VARIABLE OMP&amp;R COSTS TO BE REIMBURSED

(in dollars)

Sheet 1 of 2

Calendar Year	NORTH BAY AQUEDUCT			SOUTH BAY AQUEDUCT	CALIFORNIA AQUEDUCT							
	Reach 1	Reach 3	Total	Reach 1	Reach 1	Reach 4	Reach 14A	Reach 15A	Reach 16A	Reach 17E	Reach 18A	Reach 22B
	Calhoun and Travis Pumping Plants	Cordelia Pumping Plant (a)		South Bay and Del Valle Pumping Plants (b)	Delta Pumping Plant	Dos Amigos Pumping Plant (c)	Buena Vista Pumping Plant	Wheeler Ridge Pumping Plant	Wind Gap Pumping Plant	A.D. Edmonston (Tehachapi) Pumping Plant	Cottonwood Powerplant	Pear-blossom Pumping Plant
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1960	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	36,964	0	0	0	0	0	0	0	0
1963	0	0	0	57,703	0	0	0	0	0	0	0	0
1964	0	0	0	74,094	0	0	0	0	0	0	0	0
1965	0	0	0	142,540	0	0	0	0	0	0	0	0
1966	0	0	0	192,522	0	0	0	0	0	0	0	0
1967	0	0	0	223,040	14,531	0	0	0	0	0	0	0
1968	0	6,989	6,989	336,608	426,875	201,019	0	0	0	0	0	0
1969	0	8,551	8,551	257,184	267,632	133,813	0	0	0	0	0	0
1970	0	13,598	13,598	395,365	343,660	210,373	1	0	0	0	0	0
1971	0	10,609	10,609	380,842	572,395	224,704	134,937	7,452	0	0	0	0
1972	0	14,434	14,434	598,363	921,128	495,325	220,098	74,399	145,208	448,248	0	4,032
1973	0	14,449	14,449	493,630	667,480	366,546	284,603	254,293	406,416	1,431,060	0	201,627
1974	0	17,473	17,473	566,489	743,972	422,171	320,352	323,931	548,823	1,921,279	0	304,636
1975	0	15,977	15,977	401,980	1,098,805	548,159	500,656	522,193	1,026,984	3,666,628	0	588,141
1976	0	18,000	18,000	483,709	1,262,348	578,906	646,373	667,109	1,293,936	4,572,759	0	749,742
1977	0	14,000	14,000	549,616	1,905,161	681,365	861,910	901,074	1,782,454	6,327,451	0	1,951,955
1978	0	15,000	15,000	661,987	1,575,810	1,014,327	1,000,952	1,150,642	2,225,814	8,015,859	0	2,403,074
1979	0	13,000	13,000	556,751	2,952,739	945,040	1,039,841	1,104,636	2,205,375	7,727,429	0	2,257,756
1980	0	18,000	18,000	660,521	2,192,608	1,187,209	1,167,252	1,301,728	2,436,868	8,510,995	0	2,641,889
1981	12,698	23,200	35,898	741,190	3,288,569	1,102,999	1,272,607	1,436,157	2,618,606	9,144,992	-183,990	3,005,210
1982	14,642	26,200	40,842	832,575	1,961,281	1,258,221	1,377,481	1,382,388	2,794,877	9,771,191	-357,003	3,296,559
1983	78,578	138,200	216,778	4,236,428	14,880,601	6,842,977	7,879,472	7,989,648	14,518,714	50,746,364	-1,719,883	16,744,412
1984	84,773	233,200	317,973	4,363,391	13,515,292	7,549,723	8,939,656	9,366,037	18,575,785	59,186,866	-1,846,436	18,021,837
1985	125,973	244,200	370,173	4,392,293	17,708,641	8,679,105	10,135,386	9,737,206	19,341,213	61,640,265	-1,343,710	17,175,634
1986	121,118	225,200	346,318	4,072,333	21,095,390	8,612,474	10,392,171	9,513,738	18,575,010	66,313,115	-1,312,146	15,884,126
1987	122,861	216,200	339,061	3,908,130	26,621,817	8,831,635	10,210,428	10,039,523	20,248,908	65,512,204	-1,094,048	16,332,696
1988	178,826	222,200	401,026	3,977,813	24,093,835	9,967,992	11,117,244	10,195,191	20,565,302	72,862,493	-1,723,942	16,380,932
1989	199,301	229,200	428,501	4,083,548	22,012,032	11,564,296	12,562,009	11,913,325	23,616,433	84,440,517	-1,609,645	16,737,115
1990	273,116	234,200	507,316	4,136,135	24,446,135	12,545,759	13,442,724	12,908,951	25,852,240	84,724,263	-1,532,690	16,670,929
1991	276,080	239,200	515,280	4,224,474	24,939,221	13,175,932	13,906,765	13,384,334	26,825,320	88,013,879	-1,766,120	17,129,803
1992	266,419	233,200	499,619	4,109,049	27,556,326	12,923,482	14,293,036	14,168,992	27,968,875	92,987,020	-1,657,737	16,524,628
1993	273,271	239,200	512,471	4,209,195	26,932,924	13,620,189	14,666,852	14,533,417	28,671,565	95,249,680	-1,632,215	16,716,180
1994	269,441	238,200	507,641	4,175,152	26,735,349	13,687,685	14,637,142	14,541,162	29,036,063	103,009,679	-1,938,122	16,511,711
1995	268,512	238,200	506,712	4,160,149	30,053,950	13,780,940	15,458,156	15,536,443	30,999,903	103,306,666	-1,664,455	16,279,229
1996	266,623	238,200	504,823	4,097,350	26,250,440	14,184,885	16,169,837	15,421,208	32,687,465	109,812,663	-1,772,316	16,218,225
1997	263,760	238,200	501,960	4,089,243	31,061,142	14,055,110	15,359,518	15,489,104	30,934,063	103,238,298	-1,750,328	16,060,628
1998	258,947	312,200	571,147	3,978,574	31,125,265	17,790,624	15,801,256	16,275,431	32,049,834	107,856,452	-1,921,466	15,966,483
1999	271,658	329,200	600,858	4,290,749	28,317,473	14,579,878	16,573,059	17,068,663	33,594,584	112,998,394	-1,826,069	16,358,597
2000	274,634	333,200	607,834	4,324,654	29,409,714	15,174,387	17,526,115	17,205,956	33,881,222	114,018,605	-1,976,221	16,437,014
2001	263,961	321,200	585,161	4,034,768	33,032,804	14,577,424	16,184,294	16,695,107	32,911,567	110,886,529	-1,954,366	15,790,164
2002	274,716	335,200	609,916	4,177,003	30,515,571	15,078,922	16,739,611	17,261,535	34,006,877	114,511,315	-1,945,306	16,247,006
2003	269,884	330,200	600,084	4,225,491	32,360,969	14,928,444	17,309,925	17,016,358	33,837,274	120,442,570	-1,807,625	16,041,760
2004	269,923	330,200	600,123	4,211,458	32,333,535	14,881,474	17,251,941	16,968,497	35,681,256	120,130,442	-2,133,778	15,938,169
2005	271,911	333,200	605,111	4,382,104	31,608,185	15,019,545	17,447,761	17,178,655	36,122,229	121,680,152	-1,915,602	16,070,795
2006	272,937	336,200	609,137	4,393,160	32,748,577	15,124,706	17,459,888	17,401,747	36,153,025	121,806,134	-2,136,430	16,043,940
2007	266,163	329,200	595,363	4,277,164	34,165,689	14,668,280	17,075,114	17,038,774	35,400,477	119,352,674	-1,923,984	15,654,156
2008	274,000	340,200	614,200	4,392,794	33,779,722	15,350,302	17,540,227	17,486,183	36,335,030	122,428,326	-1,801,716	16,058,104
2009	262,346	326,200	588,546	4,201,515	33,545,019	14,680,597	16,787,271	17,500,692	34,825,498	124,529,783	-2,114,385	15,337,202
2010	353,109	347,200	700,309	4,567,398	33,109,722	15,650,878	17,738,167	18,482,596	36,751,970	123,836,795	-2,249,531	16,167,595
2011	348,293	343,200	691,493	4,338,476	34,908,411	15,546,347	18,266,380	18,148,564	36,059,382	129,081,511	-1,622,390	15,868,910
2012	335,668	332,200	667,868	4,187,943	35,767,964	14,969,455	17,641,385	17,568,691	36,809,089	125,038,679	-1,921,707	15,325,221
2013	347,436	344,200	691,636	4,295,467	36,752,363	15,556,927	18,148,045	18,051,342	37,834,743	128,449,093	-2,137,476	15,723,365
2014	350,438	348,200	698,638	4,321,860	35,936,443	15,652,015	18,288,543	18,404,676	38,135,855	129,487,542	-2,227,145	15,810,856
2015	351,486	433,200	784,686	4,345,319	35,063,432	15,578,763	18,391,697	18,328,442	38,403,954	130,504,824	-2,181,014	15,908,167
2016	356,441	441,200	797,641	4,375,621	33,981,819	15,879,439	18,560,823	18,468,876	38,713,411	131,459,765	-2,056,983	16,014,157
2017	358,465	444,200	802,665	4,377,576	34,048,203	16,081,369	18,571,421	18,687,803	38,726,519	131,483,189	-1,645,520	16,032,010
2018	359,512	446,200	805,712	4,371,711	34,010,002	15,853,963	18,521,634	19,657,424	38,620,301	131,123,359	-2,213,753	15,984,953
2019	357,627	446,200	803,827	4,330,657	35,218,273	15,962,106	19,015,673	19,253,972	37,754,406	127,979,202	-2,206,476	15,779,386
2020 (f)	367,801	464,200	832,001	4,360,958	35,295,027	16,193,121	19,377,371	19,652,808	38,582,531	130,924,625	-2,047,454	15,988,078

a) Costs for the period 1968 through 1980 are for an interim facility.

b) The relatively minor estimated costs of Del Valle Pumping Plant have been combined with those of South Bay Pumping Plant to simplify the allocation procedure.

c) Includes extra peaking costs assigned directly to Kern County Water Agency and/or to Hacienda Water District. Refer to Appendix B text "Project Water Charges, Variable OMP&amp;R Components".

# THRU VARIABLE OMP&R COMPONENT OF TRANSPORTATION CHARGE

(in dollars)

Sheet 2 of 2

Calendar Year	CALIFORNIA AQUEDUCT (continued)											GRAND TOTAL
	Reach 24	Reach 26A	Reach 28J	Reach 29A	Reach 29G	Reach 29H	Reach 29J	Reach 30	Reach 31A	Reach 33A	Total	
	Silver- wood Lake (d)	Devil Canyon Powerplant	Lake Perris (d)	Oso Pumping Plant	Pyramid Powerplant	Pyramid Lake (d)	Castaic Powerplant	Castaic Lake (d)	Las Perillas and Badger Hill Pumping Plants(e)	Devil's Den Sawtooth and Polonio PP's and San Luis Obispo Pwp		
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
1960	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	36,964
1963	0	0	0	0	0	0	0	0	0	0	0	57,703
1964	0	0	0	0	0	0	0	0	0	0	0	74,094
1965	0	0	0	0	0	0	0	0	0	0	0	142,540
1966	0	0	0	0	0	0	0	0	0	0	0	192,522
1967	0	0	0	0	0	0	0	0	0	0	14,531	237,571
1968	0	0	0	0	0	0	0	0	118,653	0	746,547	1,090,144
1969	0	0	0	0	0	0	0	0	78,305	0	479,750	745,485
1970	0	0	0	0	0	0	0	0	136,409	0	690,443	1,099,406
1971	0	0	0	0	0	0	0	0	166,214	0	1,105,702	1,497,153
1972	2,220	-3,024	0	82,844	0	3,236	-193,058	63,973	237,600	0	2,502,229	3,115,026
1973	44,757	-449,450	0	140,740	0	6,881	-905,940	0	120,737	0	2,569,750	3,077,829
1974	94,624	-506,609	49,225	165,560	0	174,648	-1,295,645	0	118,350	0	3,385,317	3,969,279
1975	25,686	-1,156,330	60,458	318,432	0	546,769	-2,215,091	0	94,164	0	5,625,654	6,043,611
1976	0	-1,315,683	0	320,686	0	0	-2,613,288	0	147,261	0	6,310,149	6,811,858
1977	126,376	-3,204,878	125,839	181,724	0	0	-2,091,714	38,325	163,189	0	9,750,231	10,313,847
1978	44,981	-4,059,050	0	199,460	0	0	-2,305,080	0	215,605	0	11,482,394	12,159,381
1979	0	-4,638,538	0	202,412	0	0	-2,791,586	5,563	172,369	0	11,183,036	11,752,787
1980	164,359	-4,371,851	134,926	214,506	-151,091	0	-2,975,434	0	219,688	0	12,673,652	13,352,173
1981	0	-4,137,154	0	217,525	-918,917	0	-2,777,586	-2,948	253,437	0	14,319,507	15,096,595
1982	132,424	-4,179,477	219,826	243,650	-1,027,421	0	-2,685,223	0	289,322	41,500	14,519,596	15,393,013
1983	0	-20,195,011	1,527,718	1,381,883	-7,634,096	0	-7,940,282	225,994	1,269,056	677,291	87,194,858	91,648,064
1984	0	-21,218,013	0	1,574,361	-10,591,551	0	-10,591,598	0	1,378,307	1,180,498	95,040,764	99,722,128
1985	636,641	-18,299,504	607,209	1,835,766	-11,887,301	0	-11,306,533	60,857	1,513,602	1,395,308	107,629,785	112,392,251
1986	0	-18,235,962	1,107,498	1,929,249	-12,407,363	0	-11,643,773	499,091	1,418,732	1,549,866	113,291,216	117,709,867
1987	390,135	-19,499,226	229,941	2,442,249	-13,537,158	0	-13,614,165	0	1,408,171	1,925,049	116,448,159	120,695,360
1988	0	-18,809,939	0	2,501,957	-13,736,478	0	-13,280,267	0	1,546,202	2,469,780	124,150,302	128,529,141
1989	1,230,579	-18,741,989	812,077	3,912,566	-17,373,085	0	-16,344,621	0	1,659,548	2,708,024	139,099,181	143,611,230
1990	0	-18,813,164	0	4,327,864	-18,679,979	0	-17,586,344	1,046,105	1,959,193	3,399,984	144,711,970	149,355,421
1991	838,247	-19,307,027	207,661	5,101,677	-20,047,539	0	-18,978,205	0	1,993,043	3,478,749	148,895,740	153,635,494
1992	0	-18,441,355	0	5,975,949	-21,749,669	0	-20,951,963	0	1,924,561	3,388,374	154,910,519	159,519,187
1993	939,384	-19,337,119	412,637	6,230,960	-21,711,487	0	-20,275,135	780,780	1,965,965	3,420,950	161,185,527	165,907,193
1994	0	-19,496,037	114,318	6,322,195	-23,197,828	0	-21,745,183	707,320	1,934,754	3,370,125	164,230,333	168,913,126
1995	0	-19,535,667	0	6,843,780	-24,056,311	0	-23,355,977	0	1,930,034	3,875,032	169,431,723	174,098,584
1996	60,825	-18,167,862	22,379	7,274,572	-23,076,580	0	-22,732,271	893,351	1,917,458	3,889,275	179,053,554	183,655,727
1997	0	-19,776,693	496,137	7,376,282	-24,172,470	0	-23,250,060	0	1,979,482	3,831,644	170,931,857	175,523,060
1998	570,794	-19,727,718	0	8,200,758	-24,588,926	0	-25,912,024	0	1,940,397	3,705,940	174,763,100	179,312,821
1999	269,455	-19,845,255	22,809	8,091,982	-24,695,036	0	-24,778,199	654,043	2,034,832	3,910,435	183,329,615	188,221,222
2000	0	-19,848,662	22,419	8,682,181	-24,268,642	0	-25,554,114	0	2,051,711	3,967,311	186,728,996	191,661,484
2001	0	-20,303,075	112,827	8,481,357	-25,144,584	0	-26,459,761	526,955	1,967,493	3,787,326	181,092,061	185,711,990
2002	1,366,843	-19,863,006	710,001	8,805,615	-24,248,389	0	-25,897,574	747,615	2,043,343	3,983,609	190,063,588	194,850,507
2003	21,681	-18,991,908	21,718	9,111,285	-23,985,980	0	-26,130,730	30,633	2,008,212	3,949,344	194,163,930	198,989,505
2004	80,251	-20,584,023	84,764	9,107,641	-25,515,211	0	-28,209,195	400,122	1,999,594	3,865,335	192,280,814	197,092,395
2005	80,846	-19,508,018	86,818	9,328,933	-24,623,259	0	-28,778,507	0	2,015,534	3,959,469	195,773,536	200,760,751
2006	0	-20,789,631	0	9,268,275	-25,587,207	0	-28,459,348	0	2,019,464	3,936,091	194,989,231	199,991,528
2007	377,345	-20,730,472	0	9,103,455	-25,742,679	0	-29,885,117	0	1,959,534	3,806,538	190,319,784	195,192,311
2008	0	-20,602,637	0	9,854,281	-25,745,741	0	-29,571,976	649,604	2,017,499	3,907,843	197,685,051	202,692,045
2009	734,626	-20,549,310	0	9,452,123	-25,505,831	0	-28,904,524	0	1,922,200	3,743,222	195,984,183	200,774,244
2010	0	-20,721,586	85	10,516,548	-25,898,334	0	-29,590,733	684,401	2,035,184	3,962,392	200,476,149	205,743,856
2011	214,807	-19,618,461	0	10,353,579	-25,627,396	0	-30,409,581	132,820	2,004,727	3,838,683	207,146,293	212,176,262
2012	1,995	-19,719,916	0	10,018,894	-26,090,505	0	-30,604,742	665,328	1,922,200	3,702,310	201,094,341	205,950,152
2013	2,032	-19,790,203	0	10,824,897	-25,757,547	0	-30,919,136	391,186	1,981,148	3,794,849	208,905,658	213,892,761
2014	2,035	-19,985,393	0	10,414,662	-25,899,145	0	-31,533,957	595,835	1,992,938	3,832,858	208,917,598	213,938,096
2015	47,626	-20,130,087	0	10,487,644	-25,800,668	0	-30,284,212	0	1,995,885	3,842,579	210,157,032	215,287,037
2016	140,056	-20,146,857	0	10,593,648	-26,084,031	0	-31,509,597	317,621	2,018,482	3,868,879	210,219,508	215,392,770
2017	14,120	-19,548,022	43,803	11,111,342	-25,600,683	0	-31,753,417	0	2,022,412	3,885,439	212,159,988	217,340,229
2018	0	-20,100,132	371,112	10,563,930	-26,500,675	0	-31,593,624	0	2,018,482	3,870,828	210,188,804	215,366,227
2019	1,569,906	-19,895,830	20,580	9,746,808	-25,780,736	0	-30,293,372	5,667,224	2,008,657	3,816,279	215,616,058	220,750,542
2020(f)	0	-18,656,796	0	10,557,616	-26,257,306	0	-32,222,290	0	2,021,429	3,867,905	213,276,665	218,469,624

- d) These values represent a proportionate allocation of the total variable OMP&R costs of pumping and power recovery plants (Table B-3) associated with net annual withdrawals from reservoir storage for the project transportation facilities. The allocation is determined annually by applying the following ratio, calculated from the data shown in Table B-6: "Reservoir Storage Changes" (withdrawals, as a positive value) conveyed thru each plant, in acre-feet ÷ "Total" annual quantity conveyed thru each plant, in acre-feet. The costs so determined are accumulated for all upstream plants for each year, for each respective reservoir.
- e) Includes extra peaking costs assigned directly to Kern County Water Agency. Refer to Appendix B text "Project Water Charges, Variable OMP&R Components".
- f) And each year thereafter for the remainder of the project repayment period.

**TABLE B-13: CAPITAL AND OPERATING COSTS OF PROJECT CONSERVATION**

(in

Calendar Year	INITIAL PROJECT CONSERVATION FACILITIES (Portion of Upper Feather Lakes, Oroville-Thermalito Facilities, Delta Facilities, and California Aqueduct)			ADDITIONAL		
	Capital Costs (a)	Operating Costs (b)	Oroville Project Power Revenues	Planning and Preoperating Costs (a/c)	Phase I	
					Capital Costs (a)	Operating Costs (d)
	(1)	(2)	(3)	(4)	(5)	(6)
1952	171,317	0	0	0	0	0
1953	312,178	0	0	0	0	0
1954	308,609	0	0	0	0	0
1955	194,637	0	0	0	0	0
1956	1,357,069	0	0	0	0	0
1957	6,210,718	0	0	0	0	0
1958	9,510,783	0	0	0	0	0
1959	11,380,592	0	0	0	0	0
1960	14,428,558	0	0	0	0	0
1961	18,511,806	0	0	0	0	0
1962	8,711,594	0	0	0	0	0
1963	72,407,072	-14,000	0	0	0	0
1964	62,401,857	-14,000	0	107,780	0	0
1965	70,729,778	-14,000	0	551,850	0	0
1966	130,512,214	-14,000	0	1,081,887	0	0
1967	93,641,541	-11,269	0	1,190,594	0	0
1968	39,401,076	1,226,590	-951,000	793,611	0	0
1969	5,107,068	2,851,288	-11,007,000	603,887	0	0
1970	4,442,116	4,790,931	-16,150,000	519,514	0	0
1971	4,053,092	5,999,840	-16,150,000	410,356	0	0
1972	4,554,104	5,338,972	-16,150,000	289,503	0	0
1973	3,595,669	6,014,086	-16,150,000	207,046	0	0
1974	5,550,887	6,910,992	-19,450,000	209,531	0	0
1975	4,819,904	6,867,014	-16,150,000	154,692	0	0
1976	5,667,632	8,507,435	-16,150,000	684,704	0	0
1977	8,136,845	8,289,582	-16,150,000	464,759	0	0
1978	17,405,802	8,697,704	-18,717,000	208,000	0	0
1979	31,006,698	8,958,735	-18,916,000	181,000	0	0
1980	49,882,489	8,259,015	-16,227,000	181,000	0	0
1981	49,444,110	8,633,591	-16,332,000	181,000	0	0
1982	21,577,779	9,346,168	-16,562,000	147,457	0	0
1983	13,199,844	9,169,261	-16,491,000	84,553	0	0
1984	14,681,603	8,872,668	-32,141,000	56,007	73,866,051	0
1985	7,854,826	2,899,866	-16,150,000	28,421	73,889,724	0
<b>SUBTOTAL 1952-1985</b>	<b>791,171,867</b>	<b>121,566,469</b>	<b>-295,994,000</b>	<b>8,337,152</b>	<b>147,755,775</b>	<b>0</b>
1986	0	2,831,632	-16,150,000	0	73,927,502	0
1987	0	6,009,765	-17,986,000	0	73,927,502	0
1988	0	6,832,344	-23,076,000	0	0	2,341,889
1989	0	3,242,084	-19,289,000	0	0	2,341,889
1990	0	4,523,437	-17,722,000	0	0	2,341,889
1991	0	5,689,978	-16,150,000	0	0	2,341,889
1992	0	5,162,049	-20,878,000	0	0	2,338,576
1993	0	3,682,607	-16,590,000	0	0	2,338,576
1994	0	4,553,337	-21,374,000	0	0	2,338,576
1995	0	4,340,409	-16,150,000	0	0	2,338,576
1996	0	-1,201,264	-16,150,000	0	0	2,342,450
1997	0	8,515,410	-16,150,000	0	0	2,342,450
1998	0	9,953,527	-16,150,000	0	0	2,342,450
1999	0	2,339,024	-16,440,000	0	0	2,342,450
2000	0	2,230,762	-16,150,000	0	0	2,358,008
2001	0	9,377,126	-18,260,000	0	0	2,358,008
2002	0	1,646,281	-16,150,000	0	0	2,358,008
2003	0	-282,087	-16,595,000	0	0	2,358,008
2004	0	4,214,261	-16,570,000	0	0	2,358,008
2005	0	268,837	-16,150,000	0	0	2,358,008
2006	0	3,476,587	-16,150,000	0	0	2,358,008
2007	0	9,384,799	-16,150,000	0	0	2,358,008
2008	0	3,365,745	-16,150,000	0	0	2,358,008
2009	0	6,559,708	-16,150,000	0	0	2,358,008
2010	0	2,678,096	-16,150,000	0	0	2,358,008
2011	0	1,969,965	-16,150,000	0	0	2,358,008
2012	0	8,646,989	-16,150,000	0	0	2,358,008
2013	0	2,278,440	-16,150,000	0	0	2,358,008
2014	0	3,506,905	-16,150,000	0	0	2,358,008
2015	0	2,298,653	-16,150,000	0	0	2,358,008
2016	0	5,161,809	-16,150,000	0	0	2,358,008
2017	0	377,698	-16,150,000	0	0	2,358,008
2018	0	3,720,505	-16,150,000	0	0	2,358,008
2019	0	1,385,258	-16,150,000	0	0	2,358,008
2020	0	1,829,742	-16,150,000	0	0	2,358,008
2021	0	1,829,742	-16,150,000	0	0	2,358,008
2022	0	1,829,742	-16,150,000	0	0	2,358,008
2023	0	1,829,742	-16,150,000	0	0	2,358,008
2024	0	1,829,742	-16,150,000	0	0	2,358,008
2025	0	1,829,742	-16,150,000	0	0	2,358,008
2026	0	1,829,742	-16,150,000	0	0	2,358,008
2027	0	1,829,742	-16,389,000	0	0	2,358,008
2028	0	1,829,742	-23,076,000	0	0	2,358,008
2029	0	1,829,742	-19,289,000	0	0	2,358,008
2030	0	1,829,742	-17,722,000	0	0	2,358,008
2031	0	1,829,742	-16,150,000	0	0	2,358,008
2032	0	1,829,742	-20,878,000	0	0	2,358,008
2033	0	1,829,742	-16,590,000	0	0	2,358,008
2034	0	1,829,742	-21,374,000	0	0	2,358,008
2035	0	1,829,742	-27,181,000	0	0	2,358,008
<b>SUBTOTAL 1986-2035</b>	<b>0</b>	<b>166,016,548</b>	<b>-867,939,000</b>	<b>0</b>	<b>147,855,004</b>	<b>112,979,948</b>
<b>TOTAL 1952-2035</b>	<b>791,171,867</b>	<b>287,583,017</b>	<b>-1,163,933,000</b>	<b>8,337,152</b>	<b>295,610,779</b>	<b>112,979,948</b>

a) Reimbursed through payments of the capital cost component of the Delta Water Charge, except for the Initial Project Conservation Facilities that will be reimbursed through a portion of the Oroville project power revenues and offset by negotiated settlements as detailed in footnote (d) of Table B-20.

b) Reimbursed through payments of the minimum OMP&R component of the Delta Water Charge, except for \$1,500,000 annually for the period 1970 through 2035 that will be reimbursed through Oroville power revenues. San Luis power revenues are included in these costs.

# FACILITIES TO BE REIMBURSED THRU DELTA WATER CHARGE

dollars)

PROJECT CONSERVATION FACILITIES						Total (\$)	Calendar Year
Phase II		Phase III		Phase IV			
Capital Costs (a)	Operating Costs (d)	Capital Costs (a)	Operating Costs (d)	Capital Costs (a)	Operating Costs (d)		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	
0	0	0	0	0	0	171,317	1952
0	0	0	0	0	0	312,178	1953
0	0	0	0	0	0	308,609	1954
0	0	0	0	0	0	194,637	1955
0	0	0	0	0	0	1,357,069	1956
0	0	0	0	0	0	6,210,718	1957
0	0	0	0	0	0	9,510,783	1958
0	0	0	0	0	0	11,380,592	1959
0	0	0	0	0	0	14,428,558	1960
0	0	0	0	0	0	18,511,806	1961
0	0	0	0	0	0	8,711,594	1962
0	0	0	0	0	0	72,393,072	1963
0	0	0	0	0	0	62,495,637	1964
0	0	0	0	0	0	71,267,628	1965
0	0	0	0	0	0	131,580,101	1966
0	0	0	0	0	0	94,820,866	1967
0	0	0	0	0	0	40,470,277	1968
0	0	0	0	0	0	-2,444,757	1969
0	0	0	0	0	0	-6,397,439	1970
0	0	0	0	0	0	-5,686,712	1971
0	0	0	0	0	0	-5,967,421	1972
0	0	0	0	0	0	-6,333,199	1973
0	0	0	0	0	0	-6,778,590	1974
0	0	0	0	0	0	-4,308,390	1975
0	0	0	0	0	0	-1,290,229	1976
0	0	0	0	0	0	741,186	1977
0	0	0	0	0	0	7,594,506	1978
0	0	0	0	0	0	21,230,433	1979
0	0	0	0	0	0	42,095,504	1980
0	0	0	0	0	0	41,926,701	1981
0	0	0	0	0	0	14,509,404	1982
0	0	0	0	0	0	5,962,658	1983
0	0	0	0	0	0	65,335,329	1984
0	0	0	0	0	0	68,522,837	1985
0	0	0	0	0	0	772,837,263	SUBTOTAL 1952-1985
0	0	0	0	0	0	60,609,134	1986
0	0	0	0	0	0	61,941,267	1987
73,903,912	0	0	0	0	0	60,002,145	1988
73,903,912	0	0	0	0	0	60,198,885	1989
73,903,912	0	0	0	0	0	63,047,238	1990
73,903,912	0	0	0	0	0	65,785,779	1991
0	2,338,577	73,882,436	0	0	0	62,843,638	1992
0	2,338,577	73,882,436	0	0	0	65,652,196	1993
0	2,338,577	73,882,436	0	0	0	61,738,926	1994
0	2,338,577	73,882,436	0	0	0	66,749,998	1995
0	2,342,451	0	2,342,450	49,271,698	0	38,947,785	1996
0	2,342,451	0	2,342,450	49,271,698	0	48,664,459	1997
0	2,342,451	0	2,342,450	49,271,698	0	50,102,576	1998
0	2,342,451	0	2,342,450	49,271,698	0	42,198,073	1999
0	2,358,009	0	2,358,008	0	1,572,006	-5,273,207	2000
0	2,358,009	0	2,358,008	0	1,572,006	-236,843	2001
0	2,358,009	0	2,358,008	0	1,572,006	-5,857,688	2002
0	2,358,009	0	2,358,008	0	1,572,006	-8,231,056	2003
0	2,358,009	0	2,358,008	0	1,572,006	-3,709,708	2004
0	2,358,009	0	2,358,008	0	1,572,006	-7,235,132	2005
0	2,358,009	0	2,358,008	0	1,572,006	-4,027,382	2006
0	2,358,009	0	2,358,008	0	1,572,006	1,880,830	2007
0	2,358,009	0	2,358,008	0	1,572,006	-4,138,224	2008
0	2,358,009	0	2,358,008	0	1,572,006	-944,261	2009
0	2,358,009	0	2,358,008	0	1,572,006	-4,825,873	2010
0	2,358,009	0	2,358,008	0	1,572,006	-5,534,004	2011
0	2,358,009	0	2,358,008	0	1,572,006	1,143,020	2012
0	2,358,009	0	2,358,008	0	1,572,006	-5,225,529	2013
0	2,358,009	0	2,358,008	0	1,572,006	-3,997,064	2014
0	2,358,009	0	2,358,008	0	1,572,006	-5,205,316	2015
0	2,358,009	0	2,358,008	0	1,572,006	-4,342,160	2016
0	2,358,009	0	2,358,008	0	1,572,006	-7,126,271	2017
0	2,358,009	0	2,358,008	0	1,572,006	-3,783,464	2018
0	2,358,009	0	2,358,008	0	1,572,006	-6,118,711	2019
0	2,358,009	0	2,358,008	0	1,572,006	-5,674,227	2020
0	2,358,009	0	2,358,008	0	1,572,006	-5,674,227	2021
0	2,358,009	0	2,358,008	0	1,572,006	-5,674,227	2022
0	2,358,009	0	2,358,008	0	1,572,006	-5,674,227	2023
0	2,358,009	0	2,358,008	0	1,572,006	-5,674,227	2024
0	2,358,009	0	2,358,008	0	1,572,006	-5,674,227	2025
0	2,358,009	0	2,358,008	0	1,572,006	-5,674,227	2026
0	2,358,009	0	2,358,008	0	1,572,006	-5,913,227	2027
0	2,358,009	0	2,358,008	0	1,572,006	-12,600,227	2028
0	2,358,009	0	2,358,008	0	1,572,006	-8,813,227	2029
0	2,358,009	0	2,358,008	0	1,572,006	-7,246,227	2030
0	2,358,009	0	2,358,008	0	1,572,006	-5,674,227	2031
0	2,358,009	0	2,358,008	0	1,572,006	-10,402,227	2032
0	2,358,009	0	2,358,008	0	1,572,006	-6,114,227	2033
0	2,358,009	0	2,358,008	0	1,572,006	-10,898,227	2034
0	2,358,009	0	2,358,008	0	1,572,006	-16,705,227	2035
295,615,648	103,612,436	295,529,744	94,258,088	197,086,792	56,592,216	601,607,424	SUBTOTAL 1986-2035
295,615,648	103,612,436	295,529,744	94,258,088	197,086,792	56,592,216	1,374,444,687	TOTAL 1952-2035

c) Under the long-term amendments of Article 22(e) and 22(g), those planning and preoperating costs of Additional Project Conservation Facilities which are incurred through the current year (1975) will be included in current calculations of the Delta Water Charge.

d) Reimbursed through the minimum OMP&R component of the Delta Water Charge.

e) Total of all columns.

TABLE B-14: CAPITAL COSTS OF TRANSPORTATION

(in dollars)

Sheet 1 of 2

Calendar Year	NORTH BAY AREA			SOUTH BAY AREA				CENTRAL COASTAL AREA		
	Napa County FC & WCD	Solano County FC & WCD	Total	Alameda County FC & WCD Zone 7	Alameda County Water District	Santa Clara Valley Water District	Total	San Luis Obispo County FC & WCD	Santa Barbara County FC & WCD	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1952	0	0	0	83	99	410	592	122	287	409
1953	0	0	0	324	407	1,809	2,540	340	795	1,135
1954	0	0	0	819	1,089	5,151	7,059	427	996	1,423
1955	0	0	0	977	1,322	6,298	8,597	213	499	712
1956	0	0	0	8,845	12,070	63,816	84,731	228	534	762
1957	16,594	10,040	26,634	21,564	29,314	649,599	700,477	295	688	983
1958	35,437	14,574	50,011	67,765	67,955	733,415	869,135	798	1,863	2,661
1959	21,488	5,800	27,288	154,258	142,962	493,059	790,279	22,873	59,917	82,790
1960	10,049	7,878	17,927	296,499	274,644	1,018,678	1,589,821	32,730	86,323	119,053
1961	7,229	7,129	14,358	853,502	797,743	1,914,670	3,565,915	14,551	36,414	50,965
1962	-197	-923	-1,120	545,261	576,700	1,686,346	2,808,307	19,302	46,085	65,387
1963	1,559	871	2,430	657,539	1,077,998	3,244,087	4,979,624	72,896	171,951	244,847
1964	42,604	31,255	73,859	712,841	1,244,236	7,247,352	9,204,429	145,883	343,964	489,847
1965	206,465	54,589	261,054	361,012	468,337	3,414,972	4,244,321	260,524	612,463	872,987
1966	468,348	43,714	512,062	593,290	562,750	2,246,487	3,402,527	599,798	1,403,747	2,003,545
1967	1,575,375	35,495	1,610,870	797,876	772,901	2,403,858	3,974,635	945,511	2,211,127	3,156,638
1968	861,415	52,839	914,254	735,234	680,201	1,994,661	3,410,096	357,052	836,196	1,193,248
1969	80,347	51,286	131,633	268,777	257,059	762,078	1,287,614	82,620	194,643	277,263
1970	49,789	60,185	109,974	59,242	57,383	137,084	253,709	53,517	126,635	180,152
1971	27,779	28,990	56,769	11,788	14,092	83,278	109,158	36,282	87,057	123,339
1972	20,422	15,761	36,183	11,907	11,346	62,506	85,759	23,120	54,988	78,108
1973	57,907	27,489	85,396	9,749	9,800	37,272	56,821	26,215	62,356	88,571
1974	172,059	56,206	228,265	15,176	17,274	71,903	104,353	27,172	64,131	91,303
1975	103,065	81,282	184,347	16,454	15,314	40,739	72,507	21,297	52,729	74,026
1976	279,862	353,601	633,463	18,280	19,018	58,749	96,047	37,591	95,003	132,594
1977	552,697	649,702	1,202,399	10,043	9,706	26,328	46,077	527,556	1,436,451	1,964,007
1978	760,327	732,303	1,492,630	17,210	15,735	37,495	70,440	929,420	2,478,099	3,407,519
1979	667,942	509,458	1,177,400	28,789	26,322	62,724	117,835	3,121,496	7,924,398	11,045,894
1980	2,416,750	2,923,836	5,340,586	40,241	36,792	87,674	164,707	9,892,539	27,475,641	37,368,180
1981	4,718,165	4,643,611	9,361,776	23,389	21,385	50,959	95,733	9,234,375	25,822,306	35,056,681
1982	1,242,069	985,931	2,228,000	13,784	12,603	30,032	56,419	1,876,110	5,279,234	7,155,344
1983	23,895	33,105	57,000	530	485	1,156	2,171	290,376	895,825	1,186,201
1984	0	0	0	6	6	14	26	156,350	416,495	572,845
1985	0	0	0	13	12	28	53	67,859	160,070	227,929
TOTAL	14,419,441	11,416,007	25,835,448	6,352,767	7,235,060	28,674,687	42,262,514	28,877,438	78,439,910	107,317,348

Calendar Year	SAN JOAQUIN VALLEY AREA									
	Devil's Den Water District	Dudley Ridge Water District	Empire West Side Irrigation District	Hacienda Water District	Kern County Water Agency		County of Kings	Oak Flat Water District	Tulare Lake Basin Water Storage District	Total
					Municipal and Industrial	Agricultural				
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1952	87	397	19	60	956	9,434	19	13	739	11,724
1953	243	1,094	55	160	2,953	28,322	57	33	2,032	34,949
1954	303	1,374	68	203	3,447	33,457	70	43	2,559	41,524
1955	153	686	37	100	1,529	15,200	37	22	1,292	19,056
1956	163	738	34	109	2,772	25,118	34	26	1,330	30,324
1957	209	950	38	139	6,222	51,819	39	30	1,596	61,042
1958	567	2,567	116	378	14,332	121,913	120	58	4,540	144,591
1959	3,805	7,865	390	1,159	26,609	262,818	400	379	14,609	318,034
1960	5,469	13,266	646	1,955	34,958	365,220	660	500	24,389	447,063
1961	5,919	22,172	1,079	3,268	52,445	555,613	1,101	597	40,732	682,926
1962	11,798	49,966	2,439	7,362	96,472	1,047,063	2,495	1,887	92,023	1,311,505
1963	48,334	211,669	10,834	31,183	369,621	4,050,112	11,083	6,015	400,037	5,138,888
1964	96,781	332,482	17,177	48,979	609,267	6,821,691	17,570	11,993	631,598	8,587,538
1965	175,603	545,108	27,828	80,301	1,116,674	12,332,117	28,472	21,895	1,028,780	15,356,778
1966	415,491	1,126,467	53,417	165,942	2,259,831	25,636,635	54,638	39,063	2,042,696	31,794,180
1967	655,994	865,502	40,094	127,499	2,050,097	24,280,892	41,013	34,931	1,550,157	29,646,179
1968	243,561	200,519	9,807	29,539	1,121,033	11,782,380	10,031	12,278	369,695	13,778,843
1969	52,216	94,950	4,813	13,987	628,734	6,574,865	4,924	7,320	178,515	7,560,324
1970	32,036	54,773	2,730	8,069	428,482	4,280,090	2,792	4,025	102,036	4,915,033
1971	17,826	26,000	1,314	3,830	198,647	1,688,314	1,345	543	48,817	1,986,636
1972	12,220	11,552	584	1,703	85,716	744,004	596	345	21,698	878,418
1973	14,586	5,279	259	779	38,975	444,231	266	222	9,765	514,562
1974	15,172	7,984	396	1,177	44,366	455,951	404	327	14,839	540,616
1975	7,534	12,556	636	1,849	35,772	375,990	649	418	23,578	458,982
1976	15,600	18,254	852	2,689	55,997	646,220	871	1,307	32,822	774,612
1977	61,216	16,710	819	2,461	34,625	813,073	840	1,478	30,860	962,082
1978	10,466	31,660	1,628	4,664	54,055	618,130	1,665	3,025	59,978	785,271
1979	21,780	51,839	2,692	7,637	85,586	1,020,123	2,754	5,047	98,735	1,296,193
1980	51,445	72,411	3,748	10,669	125,798	1,606,759	3,833	7,048	137,686	2,019,397
1981	57,093	51,000	2,633	7,513	99,641	1,308,890	2,692	4,096	96,819	1,630,377
1982	21,039	50,827	2,639	7,489	100,281	990,330	2,697	2,415	96,810	1,274,527
1983	13,711	61,640	3,202	9,083	114,650	1,108,179	3,271	94	117,410	1,431,240
1984	28,156	126,935	6,592	18,701	211,916	2,279,104	6,737	2	241,800	2,919,943
1985	47,063	127,517	6,619	18,786	206,957	2,438,181	6,765	4	242,890	3,094,782
TOTAL	2,143,639	4,204,709	206,234	619,422	10,319,416	114,812,238	210,940	167,479	7,763,862	140,447,939



# FACILITIES ALLOCATED TO EACH CONTRACTOR

(in dollars)

Sheet 2 of 2

Calendar Year	SOUTHERN CALIFORNIA AREA									
	Antelope Valley-East Kern Water Agency	Castaic Lake Water Agency	Coachella Valley County Water District	Crestline-Lake Arrowhead Water Agency	Desert Water Agency	Little Rock Creek Irrigation District	Mojave Water Agency	Palmdale Water District	San Bernardino Valley Municipal Water District	San Gabriel Valley Municipal Water District
	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)
1952	3,244	806	875	258	1,441	72	1,742	428	6,253	1,592
1953	10,312	2,586	2,744	826	4,526	230	5,470	1,366	19,603	4,991
1954	13,106	3,264	3,564	1,062	5,879	295	7,105	1,742	25,312	6,466
1955	5,566	1,459	1,413	413	2,331	120	2,835	737	9,495	2,441
1956	10,071	2,809	2,260	631	3,732	196	4,583	1,305	13,528	3,542
1957	27,128	7,321	6,540	1,871	10,781	554	13,157	3,557	41,869	10,852
1958	50,790	13,897	11,946	3,394	19,699	1,023	24,099	6,620	74,939	19,480
1959	72,567	21,775	16,383	4,764	27,022	1,392	32,795	9,329	101,692	26,324
1960	86,925	28,360	22,717	6,995	37,471	1,595	44,537	11,094	151,463	38,564
1961	129,913	40,931	35,315	12,789	58,242	2,298	64,989	16,854	241,038	58,896
1962	202,851	65,139	44,556	14,100	73,481	3,413	86,380	25,473	257,866	65,490
1963	585,420	185,689	114,927	32,453	189,542	9,843	231,549	73,512	597,803	157,626
1964	1,118,249	362,720	214,130	56,689	353,139	18,851	439,133	140,804	1,049,366	282,361
1965	1,945,205	682,093	393,410	105,921	648,816	33,470	802,950	249,414	1,953,565	523,627
1966	4,044,418	1,532,113	830,431	220,658	1,369,545	70,827	1,700,789	528,437	4,031,533	1,085,958
1967	5,049,912	2,878,828	1,092,208	300,189	1,801,272	89,567	2,212,088	662,601	5,914,375	1,574,853
1968	5,989,220	3,030,023	1,368,939	372,212	2,257,652	108,695	2,776,859	793,393	8,080,611	2,128,881
1969	5,949,372	2,456,498	1,729,425	552,787	2,852,227	124,079	3,331,076	884,884	11,093,088	2,817,659
1970	5,213,482	2,682,131	2,105,299	713,098	3,472,147	109,782	3,976,833	760,978	14,071,235	3,525,765
1971	2,690,635	1,806,511	1,112,687	350,726	1,835,066	50,355	2,169,043	361,804	8,378,541	2,044,572
1972	1,008,579	325,170	352,630	97,380	581,557	19,671	711,541	138,393	2,829,599	736,175
1973	365,238	807,344	163,124	84,913	269,054	6,471	244,201	47,488	1,816,946	416,169
1974	472,760	248,505	260,231	74,003	429,175	8,380	520,556	61,362	1,626,038	427,512
1975	253,596	195,513	197,033	53,908	324,950	4,883	398,647	33,657	1,567,782	417,109
1976	257,478	234,715	173,687	45,773	286,439	5,051	355,258	37,153	1,130,369	303,574
1977	192,569	389,462	81,748	21,160	134,817	3,395	168,053	25,125	408,675	110,898
1978	402,783	815,782	75,938	19,366	125,237	6,749	156,831	50,577	346,410	94,764
1979	515,986	933,278	95,225	24,189	157,044	8,629	196,998	64,742	430,291	118,065
1980	749,629	628,673	136,031	34,410	224,338	12,547	281,515	94,171	609,007	167,170
1981	903,538	261,812	148,688	37,619	245,217	13,725	307,489	103,010	665,610	182,665
1982	908,541	173,777	121,348	30,708	200,132	11,195	250,910	84,010	543,339	149,095
1983	1,479,556	150,587	93,313	23,616	153,889	8,613	193,024	64,627	417,944	114,700
1984	8,415,302	127,725	76,440	19,348	126,067	7,078	158,566	53,096	342,508	94,086
1985	9,801,620	81,837	48,827	12,385	80,528	4,526	101,520	33,918	219,654	60,350
TOTAL	58,925,561	21,179,133	11,134,032	3,330,614	18,362,455	747,570	21,973,121	5,425,661	68,987,347	17,772,272

Calendar  Year	SOUTHERN CALIFORNIA AREA (Continued)				FEATHER RIVER AREA				FUTURE CONTRACTOR		GRAND TOTAL
	San Geronio Pass Water Agency	The Metropolitan Water District of Southern California(a)	Ventura County Flood Control District	Total	City of Yuba City	County of Butte	Plumas County FC & WCD	Total	South Bay		
	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	
1952	986	71,025	381	89,103	0	0	0	0	75	101,903	
1953	3,098	223,994	1,224	280,970	0	0	0	0	336	319,930	
1954	4,017	288,144	1,538	361,494	0	0	0	0	984	412,484	
1955	1,515	114,821	690	143,836	0	0	0	0	1,218	173,419	
1956	2,192	184,790	1,342	230,981	0	0	0	0	11,563	358,361	
1957	6,721	532,115	3,476	665,942	0	0	0	0	29,099	1,484,177	
1958	12,064	975,890	6,605	1,220,446	0	0	2	2	36,650	2,323,496	
1959	16,315	1,409,251	10,237	1,749,846	0	0	14	14	58,692	3,026,943	
1960	23,991	1,972,431	13,202	2,439,345	0	0	28	28	124,177	4,737,414	
1961	36,895	3,310,375	19,167	4,027,702	0	0	9	9	321,136	8,663,011	
1962	40,729	3,631,067	29,729	4,540,274	0	0	32	32	266,820	8,991,205	
1963	97,383	11,498,130	87,324	13,861,201	0	0	51	51	731,910	24,958,951	
1964	173,863	18,487,321	168,509	22,865,135	0	0	7,791	7,791	1,093,825	42,322,424	
1965	322,726	34,499,114	314,049	42,474,360	0	0	3,139	3,139	470,665	63,683,304	
1966	668,706	76,225,032	697,761	93,006,208	0	0	-48	-48	814,798	131,533,272	
1967	973,664	133,745,952	1,309,710	157,605,219	0	0	47	47	1,512,650	197,506,238	
1968	1,318,144	150,023,592	1,388,188	179,556,409	0	0	51,573	51,573	1,265,782	200,170,205	
1969	1,756,762	143,379,912	1,106,457	178,034,226	0	0	234,242	234,242	429,686	187,954,988	
1970	2,202,797	167,624,899	1,186,619	207,645,065	0	0	16,233	16,233	79,059	213,199,225	
1971	1,273,131	138,385,893	767,722	161,226,686	0	0	27,204	27,204	16,249	163,546,041	
1972	458,210	46,054,071	68,865	53,381,841	0	0	9	9	14,003	54,474,321	
1973	264,755	40,838,823	297,760	45,622,286	0	0	25	25	9,253	46,376,714	
1974	265,427	19,585,773	92,376	20,072,098	0	0	53	53	35,100	25,071,788	
1975	259,599	16,905,408	83,630	20,695,715	0	0	16	16	8,413	21,494,006	
1976	188,175	16,307,885	106,416	19,431,973	0	0	0	0	14,084	21,082,773	
1977	68,349	16,080,133	183,266	17,867,650	0	0	0	0	4,936	22,047,151	
1978	58,241	30,484,929	391,819	33,029,426	0	0	0	0	6,174	38,791,460	
1979	72,510	35,115,263	441,161	38,173,381	0	0	0	0	10,328	51,821,031	
1980	102,664	25,394,602	294,032	28,728,789	0	0	0	0	14,436	73,636,095	
1981	112,208	12,765,132	124,325	15,871,038	0	0	0	0	8,390	62,023,995	
1982	91,593	9,005,072	83,741	11,653,461	0	0	0	0	4,945	22,372,696	
1983	70,449	7,521,042	72,564	10,363,924	0	0	0	0	190	13,040,726	
1984	57,732	6,317,619	61,546	15,857,113	0	0	0	0	2	19,349,929	
1985	37,000	4,053,463	39,427	14,575,055	0	0	0	0	5	17,897,824	
TOTAL	11,042,611	1,173,012,963	9,454,858	1,421,348,198	0	0	340,420	340,420	7,395,633	1,744,947,500	

a) Costs from Table B-10, allocated to MWD, are reduced herein by \$16,421,217 in 1972 under provisions of Contract Amendment No. 7.

TABLE B-15: CAPITAL COST COMPONENT OF

(in dollars)

Sheet 1 of 4

Calendar Year	NORTH BAY AREA			SOUTH BAY AREA				CENTRAL COASTAL AREA		
	Napa County FC & WCD	Solano County FC & WCD	Total	Alameda County FC & WCD, Zone 7	Alameda County Water District	Santa Clara Valley Water District	Total	San Luis Obispo County FC & WCD	Santa Barbara County FC & WCD	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1963	0	0	0	102,384	99,973	356,380	558,737	0	0	0
1964	0	0	0	119,345	153,593	517,744	790,682	8,174	20,306	28,480
1965	0	0	0	150,805	215,483	878,234	1,244,522	13,780	33,561	47,341
1966	18,559	0	18,559	166,738	238,778	1,048,098	1,453,614	22,828	54,897	77,725
1967	41,855	0	41,855	192,921	266,770	1,159,840	1,619,531	40,844	97,129	137,973
1968	120,215	0	120,215	228,134	305,215	1,279,410	1,812,759	54,861	130,039	184,900
1969	163,063	0	163,063	260,582	339,048	1,378,627	1,978,257	58,464	138,580	197,044
1970	167,060	0	167,060	272,431	351,835	1,416,533	2,040,799	60,355	143,583	203,438
1971	169,536	0	169,536	275,045	354,689	1,423,352	2,053,086	61,601	146,077	207,678
1972	170,918	0	170,918	324,209	355,390	1,427,494	2,107,093	62,548	148,404	210,952
1973	171,934	26,540	198,474	324,801	355,954	1,430,603	2,111,358	63,011	149,536	212,547
1974	174,814	27,908	202,722	325,286	356,442	1,432,457	2,114,185	63,362	150,411	213,773
1975	183,372	30,703	214,075	326,041	357,301	1,436,034	2,119,376	63,760	151,377	215,137
1976	188,499	34,746	223,245	326,859	358,063	1,438,060	2,122,982	166,607	391,632	558,239
1977	202,420	52,335	254,755	327,768	359,009	1,440,982	2,127,759	168,477	396,357	564,834
1978	229,911	84,652	314,563	328,268	359,492	1,442,292	2,130,052	194,718	467,808	662,526
1979	267,731	121,077	388,808	329,124	360,274	1,444,157	2,133,555	240,948	591,071	832,019
1980	300,955	146,418	447,373	330,556	361,584	1,447,277	2,139,417	396,215	985,238	1,381,453
1981	421,166	291,852	713,018	332,558	363,414	1,451,638	2,147,610	888,279	2,351,901	3,240,180
1982	655,852	522,830	1,178,682	333,721	364,477	1,454,173	2,152,371	1,347,605	3,636,327	4,983,932
1983	717,634	571,871	1,289,505	334,407	365,104	1,455,666	2,155,177	1,440,924	3,898,921	5,339,845
1984	718,822	573,518	1,292,340	334,433	365,128	1,455,724	2,155,285	1,455,368	3,943,480	5,398,848
1985	718,822	573,518	1,292,340	334,433	365,129	1,455,725	2,155,287	1,463,145	3,964,197	5,427,342
1986	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
1987	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
1988	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
1989	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
1990	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
1991	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
1992	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
1993	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
1994	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
1995	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
1996	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
1997	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
1998	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
1999	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
2000	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
2001	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
2002	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
2003	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
2004	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
2005	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
2006	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
2007	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
2008	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
2009	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
2010	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
2011	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
2012	718,822	573,518	1,292,340	334,434	365,129	1,455,726	2,155,289	1,466,520	3,972,159	5,438,679
2013	718,822	573,518	1,292,340	226,000	265,157	1,099,346	1,590,503	1,466,520	3,972,159	5,438,679
2014	718,822	573,518	1,292,340	191,459	211,536	937,982	1,340,977	1,458,346	3,951,853	5,410,199
2015	718,822	573,518	1,292,340	154,314	149,647	577,492	881,453	1,452,741	3,938,598	5,391,339
2016	700,263	573,518	1,273,781	135,647	126,351	407,628	669,626	1,443,692	3,917,262	5,360,954
2017	676,967	573,518	1,250,485	105,192	98,359	295,886	499,437	1,425,676	3,875,030	5,300,706
2018	598,607	573,518	1,172,125	64,519	59,915	176,316	300,750	1,411,659	3,842,120	5,253,779
2019	555,759	573,518	1,129,277	27,286	26,081	77,099	130,466	1,408,057	3,833,579	5,241,636
2020	551,763	573,518	1,125,281	13,775	13,294	39,193	66,262	1,406,165	3,829,076	5,235,241
2021	549,286	573,518	1,122,804	10,812	10,440	32,374	53,626	1,404,919	3,826,082	5,231,001
2022	547,904	573,518	1,121,422	10,225	9,739	28,232	48,196	1,403,972	3,823,755	5,227,727
2023	546,888	546,977	1,093,865	9,633	9,175	25,123	43,931	1,403,509	3,822,623	5,226,132
2024	544,008	545,610	1,089,618	9,148	8,687	23,269	41,104	1,403,159	3,821,747	5,224,906
2025	535,450	542,814	1,078,264	8,393	7,828	19,692	35,913	1,402,760	3,820,782	5,223,542
2026	530,323	538,771	1,069,094	7,575	7,066	17,666	32,307	1,299,913	3,580,527	4,880,440
2027	516,403	521,183	1,037,586	6,666	6,120	14,744	27,530	1,298,043	3,575,802	4,873,845
2028	488,911	488,866	977,777	6,166	5,638	13,434	25,238	1,271,802	3,504,351	4,776,153
2029	451,092	452,441	903,533	5,310	4,855	11,569	21,734	1,225,572	3,381,088	4,606,660
2030	417,868	427,100	844,968	3,878	3,546	8,449	15,873	1,070,306	2,986,921	4,057,227
2031	297,656	281,665	579,321	1,876	1,716	4,088	7,680	578,242	1,620,257	2,198,499
2032	62,970	50,688	113,658	713	652	1,553	2,918	118,915	335,832	454,747
2033	1,189	1,647	2,836	27	25	60	112	25,596	73,238	98,834
2034	0	0	0	1	1	2	4	11,152	28,679	39,831
2035	0	0	0	1	1	1	3	3,375	7,962	11,337
TOTAL	35,941,105	28,675,896	64,617,001	16,409,183	18,256,457	72,786,300	107,451,940	73,326,005	198,607,948	271,933,953

a) Unadjusted for prior overpayments or underpayments of charges.

# TRANSPORTATION CHARGE FOR EACH CONTRACTOR (a)

(in dollars)

Sheet 2 of 4

Calendar Year	SAN JOAQUIN VALLEY AREA									
	Devil's Den Water District	Dudley Ridge Water District	Empire West Side Irrigation District	Hacienda Water District	Kern County Water Agency		County of Kings	Oak Flat Water District	Tulare Lake Basin Water Storage District	Total
					Municipal and Industrial	Agricultural				
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1963	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	63,676	0	0	0	0	63,676
1966	0	0	0	0	119,220	0	0	0	0	119,220
1967	0	0	0	0	231,626	0	0	0	0	231,626
1968	32,077	67,141	3,202	0	333,600	375,518	8,406	3,886	54,277	878,107
1969	43,348	67,258	9,607	11,851	389,361	771,182	8,905	4,224	194,733	1,500,469
1970	49,417	73,714	9,607	12,345	420,635	937,989	9,150	4,393	140,899	1,658,149
1971	58,086	84,043	9,607	11,358	441,948	1,245,817	9,289	4,730	151,533	2,016,411
1972	66,756	93,903	9,607	12,839	451,829	1,865,502	9,356	9,066	487,385	3,006,243
1973	75,425	103,293	9,607	14,320	456,093	2,151,573	9,386	5,237	180,120	3,005,054
1974	84,095	156,771	9,607	16,296	458,031	2,409,439	9,399	5,864	305,675	3,455,177
1975	92,765	190,412	9,607	18,557	460,238	2,885,847	9,419	6,042	365,539	4,038,426
1976	101,434	132,873	9,607	19,259	462,017	3,035,571	9,451	5,913	225,083	4,001,208
1977	110,104	142,732	9,607	20,740	464,803	3,408,671	9,495	6,251	242,807	4,415,210
1978	110,104	152,592	9,607	22,715	466,525	3,789,024	9,536	6,589	260,087	4,826,779
1979	110,104	162,452	9,607	24,197	469,214	4,160,513	9,619	6,758	277,367	5,229,831
1980	110,104	172,312	9,607	25,678	473,471	4,540,060	9,756	7,096	294,647	5,642,731
1981	110,104	182,172	9,607	27,653	479,728	4,968,763	9,947	7,265	311,927	6,107,166
1982	110,104	192,501	9,607	29,135	484,684	5,364,426	10,081	7,603	329,207	6,537,348
1983	110,104	201,422	9,607	30,616	489,672	5,814,887	10,215	7,772	346,487	7,020,782
1984	110,104	211,751	9,607	32,098	495,375	6,221,026	10,378	8,109	363,767	7,462,215
1985	110,104	221,611	9,607	34,073	505,916	6,616,690	10,713	8,278	381,047	7,898,039
1986	110,104	231,471	9,607	35,554	516,210	7,009,130	11,049	8,616	398,770	8,330,511
1987	110,104	241,330	9,607	37,036	516,210	7,408,823	11,049	8,785	416,050	8,758,994
1988	110,104	251,190	9,607	38,517	516,210	7,781,924	11,049	9,123	433,330	9,161,054
1989	110,104	261,050	9,607	40,492	516,210	8,051,072	11,049	9,461	450,610	9,459,655
1990	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
1991	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
1992	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
1993	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
1994	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
1995	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
1996	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
1997	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
1998	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
1999	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
2000	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
2001	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
2002	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
2003	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
2004	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
2005	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
2006	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
2007	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
2008	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
2009	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
2010	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
2011	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
2012	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
2013	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
2014	110,104	270,910	9,607	41,974	516,210	8,330,696	11,049	9,630	487,385	9,787,565
2015	110,104	270,910	9,607	41,974	452,535	8,330,696	11,049	9,630	487,385	9,723,890
2016	110,104	270,910	9,607	41,974	396,990	8,330,696	11,049	9,630	487,385	9,668,345
2017	110,104	270,910	9,607	41,974	284,584	8,330,696	11,049	9,630	487,385	9,555,939
2018	110,104	270,910	9,607	41,974	182,610	8,330,696	2,643	9,630	487,385	9,445,559
2019	110,104	270,910	9,607	41,974	126,849	8,330,696	2,144	9,630	487,385	9,389,299
2020	110,104	270,910	9,607	41,974	95,575	8,330,696	1,899	9,630	487,385	9,357,780
2021	110,104	270,910	9,607	41,974	74,262	8,330,696	1,760	9,630	487,385	9,336,328
2022	110,104	270,910	9,607	41,974	64,381	8,330,696	1,693	9,630	487,385	9,326,380
2023	110,104	270,910	9,607	41,974	60,118	8,330,696	1,664	9,630	487,385	9,322,088
2024	110,104	270,910	9,607	41,974	58,179	8,330,696	1,650	9,630	487,385	9,320,135
2025	110,104	270,910	9,607	41,974	55,972	8,330,696	1,630	9,630	487,385	9,317,908
2026	110,104	270,910	9,607	41,974	54,193	8,330,696	1,598	9,630	487,385	9,316,097
2027	110,104	270,910	9,607	41,974	51,408	8,330,696	1,555	9,630	487,385	9,313,269
2028	110,104	270,910	9,607	41,974	49,685	8,330,696	1,513	9,630	487,385	9,311,504
2029	110,104	270,910	9,607	41,974	46,997	8,330,696	1,430	9,630	487,385	9,308,733
2030	110,104	270,910	9,607	41,974	42,740	8,330,696	1,293	9,630	487,385	9,304,339
2031	110,104	270,910	9,607	41,974	36,482	8,330,696	1,102	9,630	487,385	9,297,890
2032	110,104	270,910	9,607	41,974	31,526	8,330,696	968	9,630	487,385	9,292,800
2033	110,104	270,910	9,607	41,974	26,538	8,330,696	834	9,630	487,385	9,287,678
2034	110,104	270,910	9,607	41,974	20,835	8,330,696	672	9,630	487,385	9,281,813
2035	110,104	270,910	9,607	41,974	10,294	8,330,696	336	9,630	487,385	9,270,936
TOTAL	7,099,539	16,055,854	646,871	2,446,133	25,810,505	474,025,463	552,453	594,041	29,031,057	556,261,916

TABLE B-15: CAPITAL COST COMPONENT OF

(in dollars)

Sheet 3 of 4

Calendar Year	SOUTHERN CALIFORNIA AREA									
	Antelope Valley East Kern Water Agency	Castaic Lake Water Agency	Coachella Valley County Water District	Crestline Lake Arrowhead Water Agency	Desert Water Agency	Littlerock Creek Irrigation District	Mojave Water Agency	Palmdale Water District	San Bernardino Valley Municipal Water District	San Gabriel Valley Municipal Water District
	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)
1963	33,321	0	0	0	0	0	0	0	51,594	0
1964	62,440	19,870	14,165	4,285	36,701	1,131	27,936	8,124	81,329	34,561
1965	118,063	37,912	24,816	7,105	40,332	2,068	49,779	15,128	133,526	34,954
1966	214,819	71,840	44,385	12,374	72,605	3,733	89,719	27,534	230,698	61,000
1967	415,992	148,049	85,691	23,349	140,727	7,256	174,318	53,819	431,230	115,016
1968	667,179	291,245	140,019	38,281	230,324	11,711	284,349	86,777	725,416	193,351
1969	965,089	441,961	208,111	56,795	342,622	17,118	422,473	126,241	1,123,374	299,244
1970	1,261,016	564,149	294,134	84,291	484,494	23,290	588,163	170,256	1,675,155	439,397
1971	1,520,339	697,561	398,854	119,761	657,202	28,750	785,975	208,108	2,375,071	614,771
1972	1,654,174	787,419	454,200	137,207	748,480	31,255	893,865	226,104	2,791,827	716,470
1973	1,704,342	803,593	471,740	142,051	777,407	32,233	929,258	232,988	2,932,574	753,088
1974	1,722,509	843,751	479,854	146,274	790,790	32,555	941,404	235,350	3,022,951	773,789
1975	1,746,025	856,112	492,798	149,955	812,138	32,972	967,297	238,403	3,103,831	795,054
1976	1,758,639	865,837	502,599	152,637	828,301	33,215	987,126	240,077	3,181,814	815,801
1977	1,771,446	877,512	511,238	154,913	842,549	33,466	1,004,797	241,925	3,238,040	830,901
1978	1,781,024	896,884	515,304	155,966	849,255	33,635	1,013,156	243,174	3,258,368	836,417
1979	1,801,059	937,462	519,081	156,929	855,484	33,971	1,020,957	245,690	3,275,599	841,131
1980	1,826,725	983,884	523,818	158,132	863,296	34,400	1,030,756	248,911	3,297,002	847,004
1981	1,864,012	1,015,154	530,584	159,844	874,455	35,024	1,044,759	253,595	3,327,294	855,319
1982	1,908,955	1,028,177	537,980	161,715	886,652	35,707	1,060,054	258,719	3,360,402	864,405
1983	1,954,147	1,036,821	544,016	163,243	896,607	36,264	1,072,534	262,897	3,387,428	871,821
1984	2,027,741	1,044,311	548,658	164,417	904,261	36,692	1,082,135	266,112	3,408,217	877,526
1985	2,446,326	1,050,665	552,460	165,380	910,532	37,044	1,090,023	268,753	3,425,254	882,206
1986	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
1987	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
1988	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
1989	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
1990	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
1991	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
1992	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
1993	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
1994	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
1995	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
1996	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
1997	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
1998	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
1999	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
2000	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
2001	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
2002	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
2003	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
2004	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
2005	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
2006	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
2007	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
2008	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
2009	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
2010	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
2011	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
2012	2,933,868	1,054,735	554,889	165,996	914,537	37,269	1,095,072	270,440	3,436,180	885,208
2013	2,900,547	1,054,735	554,889	165,996	901,199	37,269	1,095,072	270,440	3,384,586	872,139
2014	2,871,428	1,034,865	540,723	161,711	891,771	36,139	1,067,136	262,316	3,354,851	864,299
2015	2,815,805	1,016,823	530,072	158,891	874,205	35,201	1,045,293	255,312	3,302,654	850,254
2016	2,719,049	982,895	510,504	153,622	841,932	33,536	1,005,354	242,906	3,205,482	824,208
2017	2,517,876	906,686	469,197	142,647	773,810	30,013	920,755	216,621	3,004,950	770,192
2018	2,266,688	763,491	414,870	127,715	684,213	25,558	810,723	183,663	2,710,763	691,857
2019	1,968,779	612,774	346,778	109,201	571,915	20,151	672,600	144,199	2,312,806	585,964
2020	1,672,852	490,586	260,754	81,705	430,043	13,980	506,909	100,184	1,761,025	445,811
2021	1,413,528	357,174	156,035	46,234	257,335	8,519	309,098	62,332	1,061,109	270,437
2022	1,279,694	267,317	100,689	28,789	166,057	6,014	201,207	44,336	644,353	168,738
2023	1,229,526	251,142	83,149	23,945	137,130	5,036	165,815	37,452	503,606	132,120
2024	1,211,359	210,984	75,035	19,722	123,747	4,714	153,668	35,090	413,229	111,419
2025	1,187,843	198,624	62,091	16,041	102,400	4,297	127,775	32,037	332,348	90,154
2026	1,175,229	188,899	52,290	13,359	86,236	4,054	107,946	30,363	254,365	69,407
2027	1,162,422	177,224	43,651	11,082	71,989	3,803	90,275	28,515	198,140	54,307
2028	1,152,843	157,851	39,584	10,030	65,283	3,634	81,916	27,266	177,812	48,791
2029	1,132,808	117,274	35,807	9,067	59,053	3,298	74,115	24,750	160,581	44,077
2030	1,107,143	70,852	31,071	7,863	51,242	2,869	64,316	21,529	139,178	38,204
2031	1,069,856	39,581	24,304	6,152	40,083	2,245	50,313	16,845	108,886	29,889
2032	1,024,913	26,558	16,908	4,281	27,886	1,562	35,019	11,722	75,778	20,803
2033	979,721	17,914	10,872	2,753	17,931	1,006	22,538	7,543	48,751	13,387
2034	906,127	10,424	6,231	1,578	10,276	577	12,937	4,328	27,962	7,682
2035	487,542	4,071	2,429	616	4,006	225	5,050	1,687	10,926	3,002
TOTAL	146,693,396	52,736,758	27,744,441	8,299,796	45,727,455	1,863,453	54,753,607	13,522,001	171,808,995	44,260,983

# TRANSPORTATION CHARGE FOR EACH CONTRACTOR<sup>(a)</sup>

(in dollars)

Sheet 4 of 4

Calendar Year	SOUTHERN CALIFORNIA AREA (continued)				FEATHER RIVER AREA				FUTURE CONTRACTOR	GRAND TOTAL
	San Geronio Pass Water Agency	The Metropolitan Water District of Southern California	Ventura County Flood Control District	Total	City of Yuba City	County of Butte	Plumas County FC & WCD	Total	South Bay	
	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
1963	0	692,304	0	777,219	0	0	0	0	45,087	1,381,043
1964	21,471	1,264,231	9,294	1,585,538	0	0	0	0	81,493	2,486,193
1965	21,624	2,183,808	17,676	2,686,791	0	0	395	395	135,901	4,178,626
1966	37,677	3,899,826	33,297	4,799,507	0	0	551	551	159,312	6,628,488
1967	70,939	7,691,330	68,005	9,425,721	0	0	549	549	199,841	11,657,096
1968	119,370	14,343,977	133,151	17,265,150	0	0	551	551	275,082	20,536,764
1969	184,936	21,806,290	202,200	26,196,454	0	0	3,116	3,116	338,043	30,376,446
1970	272,318	28,938,139	257,237	35,052,039	0	0	14,768	14,768	359,416	39,495,669
1971	381,888	37,275,957	316,260	45,380,497	0	0	15,575	15,575	363,348	50,206,131
1972	445,214	44,159,400	354,447	53,400,062	0	0	16,928	16,928	364,157	59,276,353
1973	468,006	46,450,172	357,873	56,055,325	0	0	16,929	16,929	364,853	61,964,540
1974	481,175	48,481,533	372,684	58,324,619	0	0	16,930	16,930	365,313	64,692,719
1975	494,378	49,455,747	377,279	59,521,989	0	0	16,933	16,933	367,059	66,492,995
1976	507,291	50,296,638	381,438	60,551,413	0	0	16,934	16,934	367,478	67,841,499
1977	516,651	51,107,807	386,732	61,517,977	0	0	16,934	16,934	368,178	69,265,647
1978	520,050	51,907,648	395,847	62,406,728	0	0	16,934	16,934	368,424	70,726,006
1979	522,947	53,423,996	415,337	64,049,643	0	0	16,934	16,934	368,731	73,019,521
1980	526,554	55,170,662	437,281	65,948,425	0	0	16,934	16,934	369,245	75,495,578
1981	531,661	56,433,813	451,906	67,377,420	0	0	16,934	16,934	369,963	79,972,291
1982	537,242	57,068,763	458,090	68,166,861	0	0	16,934	16,934	370,380	83,406,508
1983	541,798	57,516,683	462,255	68,746,514	0	0	16,934	16,934	370,626	84,939,383
1984	545,302	57,890,787	465,865	69,262,024	0	0	16,934	16,934	370,635	85,958,281
1985	548,174	58,205,031	468,926	70,050,774	0	0	16,934	16,934	370,635	87,211,351
1986	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	88,380,138
1987	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	88,808,621
1988	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,210,681
1989	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,509,282
1990	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,837,192
1991	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,837,192
1992	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,837,192
1993	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,837,192
1994	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,837,192
1995	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,837,192
1996	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,837,192
1997	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,837,192
1998	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,837,192
1999	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,837,192
2000	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,837,192
2001	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,837,192
2002	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,837,192
2003	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,837,192
2004	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,837,192
2005	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,837,192
2006	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,837,192
2007	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,837,192
2008	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,837,192
2009	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,837,192
2010	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,837,192
2011	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,837,192
2012	550,014	58,406,654	470,887	70,775,749	0	0	16,934	16,934	370,636	89,837,192
2013	541,882	57,714,350	470,887	69,963,991	0	0	16,934	16,934	325,549	88,415,561
2014	537,038	57,142,423	461,593	69,226,293	0	0	16,934	16,934	289,143	87,363,451
2015	528,390	56,222,846	453,211	68,088,957	0	0	16,539	16,539	234,735	85,629,253
2016	512,337	54,506,828	437,590	65,976,243	0	0	16,382	16,382	211,323	83,176,654
2017	479,075	50,715,325	402,883	61,350,030	0	0	16,385	16,385	170,795	78,143,777
2018	430,644	44,062,677	337,737	53,510,599	0	0	16,382	16,382	95,554	69,794,748
2019	365,079	36,600,365	268,687	44,579,298	0	0	13,817	13,817	32,593	60,516,386
2020	277,696	29,468,515	213,651	35,723,711	0	0	2,166	2,166	11,220	51,521,661
2021	168,126	21,130,697	154,627	25,395,251	0	0	1,358	1,358	7,287	41,147,655
2022	104,800	14,247,255	116,440	17,375,689	0	0	5	5	6,479	33,105,898
2023	82,008	11,956,482	113,015	14,720,426	0	0	5	5	5,783	30,412,230
2024	68,839	9,925,121	98,204	12,451,131	0	0	3	3	5,322	28,132,219
2025	55,636	8,950,907	93,609	11,253,762	0	0	1	1	3,577	26,912,967
2026	42,724	8,110,016	89,449	10,224,337	0	0	0	0	3,158	25,525,433
2027	33,364	7,298,847	84,156	9,257,775	0	0	0	0	2,458	24,512,463
2028	29,964	6,499,006	75,040	8,369,020	0	0	0	0	2,212	23,461,904
2029	27,067	4,982,658	55,550	6,726,105	0	0	0	0	1,905	21,568,670
2030	23,460	3,235,992	33,607	4,827,326	0	0	0	0	1,391	19,051,124
2031	18,354	1,972,841	18,981	3,398,330	0	0	0	0	673	15,482,393
2032	12,772	1,337,891	12,797	2,608,890	0	0	0	0	256	12,473,269
2033	8,216	889,971	8,632	2,029,235	0	0	0	0	10	11,418,705
2034	4,712	515,867	5,022	1,513,723	0	0	0	0	0	10,835,371
2035	1,840	201,623	1,961	724,978	0	0	0	0	0	10,007,254
TOTAL	27,501,067	2,920,332,703	23,544,358	3,538,789,013	0	0	846,694	846,694	18,531,795	4,558,432,312

TABLE B-16: MINIMUM OMP&amp;R COMPONENT OF

(in dollars)

Sheet 1 of 4

Calendar Year	NORTH BAY AREA			SOUTH BAY AREA				CENTRAL COASTAL AREA		
	Napa County FC & WCD	Solano County FC & WCD	Total	Alameda County FC & WCD, Zone 7	Alameda County Water District	Santa Clara Valley Water District	Total	San Luis Obispo County FC & WCD	Santa Barbara County FC & WCD	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1962	0	0	0	9,701	8,870	0	18,571	0	0	0
1963	0	0	0	38,050	34,789	82,898	155,737	0	0	0
1964	0	0	0	41,151	38,327	91,331	170,809	0	0	0
1965	0	0	0	78,541	75,628	195,826	349,995	0	0	0
1966	0	0	0	79,923	78,957	219,228	378,108	0	0	0
1967	0	0	0	128,153	123,939	336,156	588,248	0	1-	1-
1968	0	0	0	123,121	117,736	325,702	566,559	11,372	26,547	37,919
1969	76,239	0	76,239	138,110	130,972	352,536	621,618	62,272	145,380	207,652
1970	88,805	0	88,805	123,054	114,581	304,977	542,612	73,404	171,369	244,773
1971	34,033	0	34,033	107,297	102,841	280,808	490,946	73,217	170,933	244,150
1972	32,888	0	32,888	116,434	111,778	318,555	546,767	78,427	183,094	261,521
1973	29,165	0	29,165	116,251	110,578	308,448	535,277	75,169	175,488	250,657
1974	41,576	0	41,576	147,941	141,005	387,493	676,439	76,388	178,336	254,724
1975	34,472	0	34,472	194,790	187,467	523,610	905,867	89,947	209,992	299,939
1976	34,144	0	34,144	179,950	170,303	462,865	813,118	89,442	208,811	298,253
1977	44,717	0	44,717	200,316	189,920	516,599	906,835	90,688	211,719	302,407
1978	50,415	0	50,415	206,004	195,501	533,594	935,099	95,903	223,889	319,792
1979	50,275	0	50,275	205,290	194,822	531,789	931,901	95,725	223,478	319,203
1980	69,066	0	69,066	205,153	194,701	531,437	931,291	95,728	223,483	319,211
1981	70,516	0	70,516	206,701	196,155	535,030	937,886	96,693	225,736	322,429
1982	123,042	83,456	206,498	208,173	197,542	538,791	944,506	179,982	458,086	638,068
1983	124,871	84,669	209,540	223,523	212,426	575,017	1,010,966	210,478	554,124	764,602
1984	123,296	83,312	206,608	221,197	210,201	568,974	1,000,372	211,614	561,609	773,223
1985	124,174	84,513	208,687	221,850	210,842	570,616	1,003,308	205,205	536,777	741,982
1986	123,977	84,010	207,987	221,443	210,438	569,789	1,001,670	206,207	532,784	738,991
1987	122,682	83,562	206,244	221,197	210,217	569,259	1,000,673	206,838	535,383	742,221
1988	122,931	84,069	207,000	220,479	209,519	567,469	997,467	207,439	538,206	745,645
1989	123,742	83,783	207,525	220,029	209,074	566,377	995,480	203,205	522,706	725,911
1990	124,214	84,496	208,710	220,043	209,090	566,413	995,546	205,450	530,519	735,969
1991	124,228	84,518	208,746	220,192	209,222	566,720	996,134	205,468	530,093	735,561
1992	122,947	84,208	207,155	219,384	208,453	564,766	992,603	203,961	525,189	729,150
1993	124,006	84,297	208,303	219,258	208,330	564,461	992,049	203,985	525,112	729,097
1994	122,938	84,195	207,133	218,982	208,053	563,792	990,827	202,826	521,105	723,931
1995	122,910	84,152	207,062	219,166	208,236	564,241	991,643	206,286	533,855	740,141
1996	123,038	84,209	207,247	218,935	207,994	563,751	990,680	205,343	530,542	735,885
1997	122,983	84,127	207,110	219,284	208,344	564,596	992,224	205,598	531,048	736,646
1998	122,511	83,412	205,923	218,733	207,819	563,327	989,879	202,869	522,791	725,660
1999	123,024	84,188	207,212	219,290	208,351	564,609	992,250	205,031	529,073	734,104
2000	124,725	84,698	209,423	220,653	209,650	568,153	998,456	206,173	532,007	738,180
2001	123,196	83,900	207,096	220,154	209,175	567,010	996,339	203,551	523,938	727,489
2002	123,692	84,649	208,341	220,436	209,432	567,629	997,497	205,546	529,573	735,119
2003	123,227	83,946	207,173	220,559	209,559	567,935	998,053	204,013	525,191	729,204
2004	123,212	83,922	207,134	220,250	209,271	567,245	996,766	202,754	520,935	723,689
2005	123,614	84,532	208,146	220,692	209,691	568,255	998,638	203,955	523,847	727,802
2006	123,604	84,516	208,120	220,784	209,782	568,479	999,045	204,055	524,079	728,134
2007	123,116	83,778	206,894	220,378	209,403	567,559	997,340	201,975	518,124	720,099
2008	123,579	84,478	208,057	220,814	209,813	568,552	999,179	204,089	524,091	728,180
2009	123,042	83,669	206,711	220,112	209,138	566,918	996,168	201,287	515,718	717,005
2010	124,332	85,616	209,948	221,010	210,009	569,028	1,000,047	204,398	525,178	729,576
2011	123,860	84,904	208,764	220,469	209,492	567,774	997,735	202,574	520,059	722,633
2012	123,711	84,678	208,389	220,234	209,259	567,212	996,705	201,454	516,104	717,558
2013	123,803	84,818	208,621	220,521	209,543	567,902	997,966	202,437	519,554	721,991
2014	123,802	84,817	208,619	220,495	209,516	567,839	997,850	202,620	520,179	722,799
2015	123,783	84,788	208,571	220,445	209,467	567,715	997,627	202,440	519,636	722,076
2016	123,801	84,815	208,616	220,644	209,647	568,140	998,431	202,825	520,697	723,522
2017	124,190	85,402	209,592	220,685	209,685	568,242	998,612	203,865	523,310	727,175
2018	123,773	84,772	208,545	220,637	209,641	568,127	998,405	202,829	520,720	723,549
2019	123,727	84,703	208,430	220,512	209,534	567,879	997,925	202,693	520,371	723,064
2020	123,658	84,598	208,256	220,728	209,731	568,345	998,804	203,127	521,661	724,788
2021	123,658	84,598	208,256	220,728	209,731	568,345	998,804	203,127	521,661	724,788
2022	123,658	84,598	208,256	220,728	209,731	568,345	998,804	203,127	521,661	724,788
2023	123,658	84,598	208,256	220,728	209,731	568,345	998,804	203,127	521,661	724,788
2024	123,658	84,598	208,256	220,728	209,731	568,345	998,804	203,127	521,661	724,788
2025	123,658	84,598	208,256	220,728	209,731	568,345	998,804	203,127	521,661	724,788
2026	123,658	84,598	208,256	220,728	209,731	568,345	998,804	203,127	521,661	724,788
2027	123,658	84,598	208,256	220,728	209,731	568,345	998,804	203,127	521,661	724,788
2028	123,658	84,598	208,256	220,728	209,731	568,345	998,804	203,127	521,661	724,788
2029	123,658	84,598	208,256	220,728	209,731	568,345	998,804	203,127	521,661	724,788
2030	123,658	84,598	208,256	220,728	209,731	568,345	998,804	203,127	521,661	724,788
2031	123,658	84,598	208,256	220,728	209,731	568,345	998,804	203,127	521,661	724,788
2032	123,658	84,598	208,256	220,728	209,731	568,345	998,804	203,127	521,661	724,788
2033	123,658	84,598	208,256	220,728	209,731	568,345	998,804	203,127	521,661	724,788
2034	123,658	84,598	208,256	220,728	209,731	568,345	998,804	203,127	521,661	724,788
2035	123,658	84,598	208,256	220,728	209,731	568,345	998,804	203,127	521,661	724,788
TOTAL	7,330,142	4,558,145	11,888,287	14,539,221	13,819,424	37,462,963	65,821,608	12,097,725	30,887,143	42,984,868

a) Unadjusted for prior overpayments or underpayments of charges.

# TRANSPORTATION CHARGE FOR EACH CONTRACTOR<sup>(a)</sup>

(in dollars)

Sheet 2 of 4

Calendar Year	SAN JOAQUIN VALLEY AREA									
	Devil's Den Water District	Dudley Ridge Water District	Empire West Side Irrigation District	Hacienda Water District	Kern County Water Agency		County of Kings	Oak Flat Water District	Tulare Lake Basin Water Storage District	Total
					Municipal and Industrial	Agricultural				
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1962	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0
1967	0	1-	0	0	1-	17-	0	0	2-	21-
1968	8,087	36,562	1,898	5,386	58,705	655,784	1,942	2,000	69,653	840,017
1969	43,741	44,113	2,171	6,497	78,024	1,168,235	2,220	2,018	81,593	1,428,612
1970	51,535	45,394	2,216	6,687	93,316	1,346,561	2,268	2,085	83,612	1,633,674
1971	51,407	46,364	2,236	6,831	102,770	1,600,124	2,288	2,209	84,846	1,899,075
1972	55,063	48,252	2,338	7,109	117,774	1,680,921	2,392	2,180	88,517	2,004,546
1973	52,783	48,612	2,321	7,160	121,358	1,676,434	2,374	2,241	88,485	2,001,768
1974	53,645	51,547	2,499	7,594	131,593	1,783,023	2,554	2,462	94,568	2,129,485
1975	63,182	64,866	3,145	9,556	157,591	2,163,453	3,218	3,069	119,053	2,587,133
1976	62,843	69,077	3,362	10,177	171,105	2,267,338	3,440	3,564	127,035	2,717,941
1977	63,717	69,217	3,393	10,197	165,879	2,165,341	3,470	3,452	127,746	2,612,412
1978	67,368	70,074	3,432	10,323	168,561	2,219,918	3,509	3,490	129,280	2,675,955
1979	67,244	69,965	3,425	10,307	168,503	2,218,178	3,503	3,474	129,056	2,673,655
1980	67,242	69,680	3,410	10,264	167,822	2,211,482	3,490	3,463	128,538	2,665,391
1981	67,928	71,740	3,517	10,567	171,505	2,253,637	3,598	3,631	132,428	2,718,551
1982	68,117	71,926	3,528	10,595	171,784	2,258,118	3,608	3,643	132,797	2,724,116
1983	74,273	80,636	3,955	11,877	192,932	2,515,803	4,045	3,853	148,872	3,036,246
1984	73,446	79,195	3,885	11,667	189,535	2,475,786	3,974	3,805	146,243	2,987,536
1985	73,948	80,265	3,935	11,823	192,266	2,506,905	4,026	3,827	148,179	3,025,174
1986	77,879	80,255	3,931	11,821	192,661	2,485,424	4,022	3,835	148,098	3,007,926
1987	77,985	80,968	3,965	11,929	194,603	2,504,689	4,054	3,849	149,365	3,031,407
1988	77,748	80,264	3,930	11,823	192,873	2,486,167	4,019	3,828	148,083	3,008,735
1989	77,507	79,703	3,905	11,741	191,457	2,470,665	3,995	3,816	147,076	2,989,865
1990	77,838	80,079	3,921	11,796	192,507	2,483,431	4,011	3,823	147,752	3,005,158
1991	77,866	80,145	3,925	11,806	192,667	2,485,189	4,016	3,825	147,875	3,007,314
1992	77,725	80,155	3,926	11,808	192,812	2,485,408	4,015	3,821	147,875	3,007,545
1993	77,804	80,148	3,924	11,807	192,780	2,485,766	4,013	3,821	147,868	3,007,931
1994	77,623	79,917	3,914	11,774	192,174	2,478,346	4,005	3,816	147,445	2,999,014
1995	77,784	80,324	3,932	11,833	193,257	2,490,085	4,022	3,825	148,182	3,013,244
1996	77,621	79,789	3,908	11,754	191,908	2,475,864	3,997	3,815	147,207	2,995,863
1997	77,844	80,435	3,939	11,849	193,536	2,493,208	4,027	3,829	148,377	3,017,044
1998	77,686	80,261	3,928	11,824	193,131	2,487,985	4,019	3,825	148,055	3,010,714
1999	77,762	80,036	3,919	11,791	192,509	2,482,712	4,010	3,821	147,663	3,004,223
2000	78,275	80,736	3,954	11,893	194,158	2,503,081	4,044	3,846	148,950	3,028,937
2001	78,226	81,047	3,969	11,939	194,973	2,510,208	4,059	3,852	149,500	3,037,773
2002	78,306	80,847	3,959	11,909	194,430	2,505,687	4,050	3,848	149,154	3,032,190
2003	78,254	80,935	3,962	11,922	194,690	2,507,887	4,053	3,850	149,304	3,034,857
2004	78,224	80,886	3,960	11,915	194,571	2,506,455	4,051	3,850	149,212	3,033,124
2005	78,171	80,755	3,953	11,897	194,222	2,502,620	4,045	3,846	148,977	3,028,486
2006	78,240	80,937	3,962	11,922	194,665	2,507,466	4,053	3,851	149,310	3,034,406
2007	78,162	80,953	3,964	11,925	194,742	2,507,471	4,053	3,850	149,331	3,034,451
2008	78,298	81,076	3,968	11,943	195,031	2,511,469	4,061	3,854	149,560	3,039,260
2009	78,062	80,723	3,952	11,891	194,176	2,501,096	4,043	3,845	148,906	3,026,694
2010	78,338	80,975	3,964	11,928	194,777	2,509,315	4,056	3,851	149,375	3,036,579
2011	78,317	81,116	3,970	11,950	195,189	2,513,240	4,062	3,854	149,625	3,041,323
2012	78,180	81,010	3,966	11,933	194,951	2,509,657	4,057	3,851	149,423	3,037,028
2013	78,313	81,300	3,980	11,978	195,672	2,517,765	4,071	3,858	149,952	3,046,889
2014	78,346	81,192	3,976	11,959	195,377	2,515,154	4,064	3,856	149,761	3,043,685
2015	78,278	81,032	3,966	11,936	194,941	2,510,328	4,060	3,852	149,477	3,037,870
2016	78,252	80,951	3,962	11,924	194,733	2,508,203	4,054	3,850	149,330	3,035,259
2017	78,264	80,979	3,965	11,929	194,808	2,509,026	4,055	3,851	149,380	3,036,257
2018	78,251	80,948	3,962	11,924	194,732	2,508,152	4,054	3,850	149,328	3,035,201
2019	78,389	81,282	3,978	11,974	195,691	2,518,730	4,068	3,857	149,920	3,047,889
2020	78,341	81,166	3,974	11,956	195,335	2,514,916	4,064	3,855	149,721	3,043,328
2021	78,341	81,166	3,974	11,956	195,335	2,514,916	4,064	3,855	149,721	3,043,328
2022	78,341	81,166	3,974	11,956	195,335	2,514,916	4,064	3,855	149,721	3,043,328
2023	78,341	81,166	3,974	11,956	195,335	2,514,916	4,064	3,855	149,721	3,043,328
2024	78,341	81,166	3,974	11,956	195,335	2,514,916	4,064	3,855	149,721	3,043,328
2025	78,341	81,166	3,974	11,956	195,335	2,514,916	4,064	3,855	149,721	3,043,328
2026	78,341	81,166	3,974	11,956	195,335	2,514,916	4,064	3,855	149,721	3,043,328
2027	78,341	81,166	3,974	11,956	195,335	2,514,916	4,064	3,855	149,721	3,043,328
2028	78,341	81,166	3,974	11,956	195,335	2,514,916	4,064	3,855	149,721	3,043,328
2029	78,341	81,166	3,974	11,956	195,335	2,514,916	4,064	3,855	149,721	3,043,328
2030	78,341	81,166	3,974	11,956	195,335	2,514,916	4,064	3,855	149,721	3,043,328
2031	78,341	81,166	3,974	11,956	195,335	2,514,916	4,064	3,855	149,721	3,043,328
2032	78,341	81,166	3,974	11,956	195,335	2,514,916	4,064	3,855	149,721	3,043,328
2033	78,341	81,166	3,974	11,956	195,335	2,514,916	4,064	3,855	149,721	3,043,328
2034	78,341	81,166	3,974	11,956	195,335	2,514,916	4,064	3,855	149,721	3,043,328
2035	78,341	81,166	3,974	11,956	195,335	2,514,916	4,064	3,855	149,721	3,043,328
TOTAL	4,972,843	5,158,299	252,509	759,860	12,341,786	160,383,629	258,281	246,717	9,514,731	193,888,655

TABLE B-16: MINIMUM OMP&amp;R COMPONENT OF

(in dollars)

Sheet 3 of 4

Calendar Year	SOUTHERN CALIFORNIA AREA									
	Antelope Valley East Kern Water Agency	Castaic Lake Water Agency	Coachella Valley County Water District	Crestline Lake Arrowhead Water Agency	Desert Water Agency	Littlerock Creek Irrigation District	Mojave Water Agency	Palmdale Water District	San Bernardino Valley Municipal Water District	San Gabriel Valley Municipal Water District
	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)
1962	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0
1967	1-	0	0	0	0	0	1-	0	1-	0
1968	62,934	19,074	11,314	2,861	18,657	1,052	23,579	7,903	50,595	13,926
1969	83,626	25,344	15,034	3,801	24,795	1,400	31,333	10,504	67,239	18,507
1970	104,052	31,532	18,716	4,733	30,865	1,741	38,984	13,065	83,703	23,033
1971	171,639	52,017	30,933	7,823	51,017	2,873	64,310	21,556	138,344	38,043
1972	348,272	141,359	102,444	29,751	168,949	6,322	204,372	46,059	526,538	138,371
1973	386,897	163,422	118,103	33,516	194,775	6,989	237,287	51,425	696,691	183,219
1974	417,876	172,667	127,420	35,876	210,141	7,359	256,828	54,086	756,896	199,764
1975	484,373	216,787	146,784	41,791	242,082	8,689	294,894	62,961	873,847	230,542
1976	560,872	244,674	163,622	48,013	269,847	10,219	325,184	74,579	1,011,959	263,893
1977	554,487	228,205	165,672	47,065	273,232	10,233	332,594	74,388	976,738	257,103
1978	574,241	236,213	172,192	50,575	283,982	10,587	342,049	76,613	1,038,174	270,574
1979	572,354	234,837	173,414	52,928	285,994	10,546	340,208	76,338	1,079,353	278,253
1980	572,891	234,110	170,602	49,068	281,353	10,561	341,111	76,443	1,010,596	264,982
1981	582,609	241,441	174,560	51,684	287,889	10,738	345,862	77,720	1,057,455	274,961
1982	584,073	250,917	173,930	50,320	286,848	10,762	347,128	77,904	1,034,157	270,696
1983	689,670	287,933	232,878	70,562	384,062	13,398	457,641	95,655	1,397,332	360,857
1984	685,067	297,808	242,657	82,015	400,200	13,360	458,679	95,298	1,599,648	400,429
1985	689,966	292,923	228,847	64,035	377,420	13,454	461,076	95,990	1,280,263	338,541
1986	732,819	283,530	244,714	83,021	403,599	13,506	461,912	96,300	1,617,582	404,482
1987	734,439	305,835	231,435	66,778	381,682	13,528	461,961	96,466	1,328,609	348,095
1988	733,513	298,683	239,448	76,063	394,908	13,534	463,036	96,486	1,493,545	380,453
1989	734,079	308,709	225,628	57,853	372,101	13,580	465,857	96,724	1,170,034	317,834
1990	736,683	274,166	252,233	89,784	415,994	13,629	467,067	97,102	1,737,521	428,755
1991	736,515	302,772	229,878	62,522	379,114	13,621	466,982	97,035	1,253,009	334,214
1992	737,208	325,670	241,057	75,834	397,559	13,653	467,713	97,231	1,489,263	380,407
1993	737,942	283,367	229,761	61,522	378,921	13,671	468,814	97,358	1,234,997	331,005
1994	737,209	284,908	242,040	76,556	399,181	13,667	468,725	97,311	1,502,101	383,087
1995	738,833	324,694	246,928	82,352	407,245	13,695	469,112	97,513	1,605,109	403,252
1996	739,727	283,619	239,794	72,387	395,469	13,745	471,772	97,799	1,428,150	369,199
1997	737,093	318,232	240,409	75,714	396,493	13,632	466,293	97,123	1,487,183	379,764
1998	737,711	307,662	232,568	65,529	383,562	13,665	467,591	97,323	1,306,026	344,634
1999	739,938	289,321	237,371	69,649	391,474	13,734	471,293	97,769	1,379,538	359,632
2000	743,922	335,379	244,380	77,471	403,043	13,798	472,894	98,221	1,519,322	387,230
2001	741,914	292,522	243,758	78,338	402,015	13,730	469,424	97,800	1,534,624	389,610
2002	743,849	289,331	227,725	57,168	375,565	13,793	472,799	98,194	1,158,539	316,826
2003	744,972	307,727	241,037	72,942	397,524	13,829	473,844	98,426	1,438,672	371,647
2004	744,551	298,137	240,171	72,097	396,097	13,820	473,387	98,357	1,423,710	368,650
2005	744,237	308,116	240,226	72,155	396,185	13,813	473,398	98,322	1,424,755	368,855
2006	744,493	322,929	247,019	80,614	407,389	13,814	473,056	98,320	1,575,084	398,127
2007	742,384	309,370	235,786	68,151	388,859	13,755	470,369	97,934	1,353,482	354,420
2008	745,234	292,146	244,228	76,975	402,784	13,826	473,547	98,430	1,510,389	385,588
2009	741,744	324,557	232,528	64,141	383,487	13,751	470,445	97,894	1,282,191	340,526
2010	744,563	291,824	244,656	77,782	403,494	13,808	472,943	98,307	1,524,708	388,279
2011	746,886	306,586	240,043	70,919	395,889	13,878	475,576	98,760	1,402,713	364,930
2012	743,626	291,559	239,992	72,718	395,801	13,789	471,591	98,172	1,434,615	370,458
2013	746,681	300,326	241,540	73,205	398,355	13,860	474,590	98,673	1,443,382	372,698
2014	746,311	294,931	241,585	73,290	398,425	13,856	474,526	98,629	1,444,892	372,977
2015	745,166	330,943	240,688	72,580	396,947	13,830	473,702	98,446	1,432,290	370,377
2016	745,779	301,553	240,297	71,636	396,302	13,851	474,700	98,578	1,415,459	367,267
2017	746,358	314,612	241,777	73,177	398,745	13,865	475,259	98,679	1,442,938	372,721
2018	745,833	319,481	241,820	73,477	398,813	13,853	474,742	98,580	1,448,154	373,655
2019	749,679	171,628	228,516	55,558	376,854	13,949	478,282	99,233	1,129,726	312,138
2020	747,424	309,528	242,114	73,339	399,297	13,887	475,792	98,825	1,445,759	373,365
2021	747,424	309,528	242,114	73,339	399,297	13,887	475,792	98,825	1,445,759	373,365
2022	747,424	309,528	242,114	73,339	399,297	13,887	475,792	98,825	1,445,759	373,365
2023	747,424	309,528	242,114	73,339	399,297	13,887	475,792	98,825	1,445,759	373,365
2024	747,424	309,528	242,114	73,339	399,297	13,887	475,792	98,825	1,445,759	373,365
2025	747,424	309,528	242,114	73,339	399,297	13,887	475,792	98,825	1,445,759	373,365
2026	747,424	309,528	242,114	73,339	399,297	13,887	475,792	98,825	1,445,759	373,365
2027	747,424	309,528	242,114	73,339	399,297	13,887	475,792	98,825	1,445,759	373,365
2028	747,424	309,528	242,114	73,339	399,297	13,887	475,792	98,825	1,445,759	373,365
2029	747,424	309,528	242,114	73,339	399,297	13,887	475,792	98,825	1,445,759	373,365
2030	747,424	309,528	242,114	73,339	399,297	13,887	475,792	98,825	1,445,759	373,365
2031	747,424	309,528	242,114	73,339	399,297	13,887	475,792	98,825	1,445,759	373,365
2032	747,424	309,528	242,114	73,339	399,297	13,887	475,792	98,825	1,445,759	373,365
2033	747,424	309,528	242,114	73,339	399,297	13,887	475,792	98,825	1,445,759	373,365
2034	747,424	309,528	242,114	73,339	399,297	13,887	475,792	98,825	1,445,759	373,365
2035	747,424	309,528	242,114	73,339	399,297	13,887	475,792	98,825	1,445,759	373,365
TOTAL	45,296,573	18,520,536	14,473,982	4,349,799	23,870,735	839,803	28,522,992	5,997,182	86,183,983	22,311,329



# TRANSPORTATION CHARGE FOR EACH CONTRACTOR (a)

(in dollars)

Sheet 4 of 4

Calendar Year	SOUTHERN CALIFORNIA AREA (continued)				FEATHER RIVER AREA				FUTURE CONTRACTOR	GRAND TOTAL
	San Geronio Pass Water Agency	The Metropolitan Water District of Southern California	Ventura County Flood Control District	Total	City of Yuba City	County of Butte	Plumas County FC & WCD	Total	South Bay	
	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
1962	0	0	0	0	0	0	0	0	0	18,571
1963	0	0	0	0	0	0	0	0	12,627	168,364
1964	0	0	0	0	0	0	0	0	13,939	184,748
1965	0	0	0	0	0	0	0	0	28,941	378,936
1966	0	0	0	0	0	0	0	0	31,402	409,510
1967	0	28-	0	31-	0	0	0	0	47,841	636,036
1968	8,530	940,744	9,192	1,170,361	0	0	0	0	45,589	2,660,445
1969	11,336	1,254,853	12,214	1,559,986	0	0	0	0	49,919	3,944,026
1970	14,112	1,567,891	15,196	1,947,623	0	0	0	0	64,935	4,522,422
1971	23,325	2,607,229	25,068	3,234,177	0	0	58	58	50,971	5,953,410
1972	85,588	7,717,060	65,647	9,580,732	0	0	40	40	75,730	12,502,224
1973	113,437	9,521,030	75,419	11,782,210	0	0	1	1	49,010	14,648,088
1974	123,628	11,055,643	79,647	13,497,831	0	0	145	145	71,149	16,671,349
1975	142,728	13,186,627	98,388	16,030,493	0	0	1,053	1,053	107,062	19,966,019
1976	163,777	14,721,912	112,512	17,971,063	0	0	209	209	125,202	21,959,930
1977	159,231	13,750,938	105,445	16,935,331	0	0	208	208	140,950	20,942,860
1978	167,844	14,559,693	109,622	17,894,359	0	0	207	207	146,068	22,021,895
1979	172,922	14,543,266	108,385	17,928,798	0	0	206	206	145,578	22,049,616
1980	164,205	14,141,052	108,035	17,425,009	0	0	206	206	145,515	22,555,689
1981	170,629	14,851,062	111,737	18,238,347	0	0	206	206	146,407	22,434,342
1982	167,793	14,779,769	116,185	18,150,482	0	0	207	207	147,379	22,811,256
1983	224,152	17,253,785	131,972	21,599,897	0	0	208	208	159,955	26,781,414
1984	250,065	20,793,494	134,855	25,453,575	0	0	206	206	158,181	30,579,701
1985	209,451	18,050,914	133,483	22,236,366	0	0	206	206	158,729	27,374,452
1986	252,643	18,226,312	130,435	22,950,855	0	0	207	207	158,356	28,065,992
1987	215,691	18,939,683	137,817	23,262,019	0	0	207	207	158,241	28,401,012
1988	236,873	20,862,265	135,420	25,424,227	0	0	207	207	157,566	30,540,847
1989	195,770	18,165,779	138,722	22,262,670	0	0	207	207	157,068	27,338,726
1990	268,426	20,555,718	127,524	25,464,602	0	0	207	207	157,006	30,567,198
1991	206,477	18,779,747	136,915	22,998,801	0	0	207	207	156,947	28,103,710
1992	236,734	20,668,149	144,416	25,274,894	0	0	207	207	156,338	30,367,892
1993	204,331	17,846,852	130,602	22,019,143	0	0	207	207	156,128	27,112,858
1994	238,465	18,980,785	131,056	23,555,091	0	0	207	207	155,937	28,632,140
1995	251,667	21,541,263	144,154	26,325,817	0	0	207	207	156,106	31,434,220
1996	229,285	18,864,859	130,736	23,336,541	0	0	206	206	155,796	28,422,218
1997	236,340	19,751,123	142,041	24,341,440	0	0	206	206	156,119	29,450,789
1998	213,293	19,730,360	138,585	24,038,509	0	0	206	206	155,670	29,126,561
1999	223,027	18,885,770	132,650	23,291,166	0	0	206	206	156,083	28,385,244
2000	241,070	20,999,036	147,960	25,683,726	0	0	208	208	157,070	30,816,000
2001	242,713	19,326,291	133,884	23,966,623	0	0	208	208	156,789	29,092,317
2002	194,937	17,577,317	132,901	21,658,944	0	0	208	208	156,941	26,789,240
2003	230,835	19,753,163	138,954	24,283,572	0	0	208	208	157,000	29,410,067
2004	228,879	19,271,539	135,790	23,765,185	0	0	208	208	156,830	28,882,936
2005	229,014	19,647,073	139,048	24,155,197	0	0	208	208	157,154	29,275,631
2006	248,204	20,695,209	143,907	25,448,165	0	0	208	208	157,230	30,575,308
2007	219,630	19,497,455	139,410	23,891,005	0	0	208	208	156,939	29,006,936
2008	239,975	19,386,208	133,875	24,003,205	0	0	208	208	157,246	29,135,335
2009	210,527	19,854,786	144,355	24,160,932	0	0	208	208	156,674	29,264,392
2010	241,753	19,403,552	133,767	24,039,436	0	0	208	208	157,416	29,173,210
2011	226,387	19,605,515	138,652	24,086,734	0	0	208	208	157,008	29,214,405
2012	230,115	19,090,091	133,634	23,586,161	0	0	208	208	156,799	28,702,848
2013	231,503	19,478,787	136,627	24,010,227	0	0	208	208	157,060	29,142,962
2014	231,689	19,289,098	134,845	23,815,054	0	0	208	208	157,032	28,945,247
2015	230,006	20,551,202	146,584	25,102,761	0	0	208	208	156,984	30,226,097
2016	227,945	19,443,942	136,976	23,934,285	0	0	208	208	157,030	29,057,351
2017	231,503	19,973,877	141,264	24,524,775	0	0	208	208	157,121	29,653,740
2018	232,126	19,842,363	142,850	24,405,747	0	0	208	208	157,022	29,528,677
2019	191,730	13,851,495	94,575	17,753,363	0	0	208	208	157,043	22,887,922
2020	231,913	19,848,816	139,652	24,399,711	0	0	208	208	157,108	29,532,203
2021	231,913	19,848,816	139,652	24,399,711	0	0	208	208	157,108	29,532,203
2022	231,913	19,848,816	139,652	24,399,711	0	0	208	208	157,108	29,532,203
2023	231,913	19,848,816	139,652	24,399,711	0	0	208	208	157,108	29,532,203
2024	231,913	19,848,816	139,652	24,399,711	0	0	208	208	157,108	29,532,203
2025	231,913	19,848,816	139,652	24,399,711	0	0	208	208	157,108	29,532,203
2026	231,913	19,848,816	139,652	24,399,711	0	0	208	208	157,108	29,532,203
2027	231,913	19,848,816	139,652	24,399,711	0	0	208	208	157,108	29,532,203
2028	231,913	19,848,816	139,652	24,399,711	0	0	208	208	157,108	29,532,203
2029	231,913	19,848,816	139,652	24,399,711	0	0	208	208	157,108	29,532,203
2030	231,913	19,848,816	139,652	24,399,711	0	0	208	208	157,108	29,532,203
2031	231,913	19,848,816	139,652	24,399,711	0	0	208	208	157,108	29,532,203
2032	231,913	19,848,816	139,652	24,399,711	0	0	208	208	157,108	29,532,203
2033	231,913	19,848,816	139,652	24,399,711	0	0	208	208	157,108	29,532,203
2034	231,913	19,848,816	139,652	24,399,711	0	0	208	208	157,108	29,532,203
2035	231,913	19,848,816	139,652	24,399,711	0	0	208	208	157,108	29,532,203
TOTAL	13,852,924	1,181,214,654	8,418,365	1,453,852,857	0	0	13,748	13,748	9,970,556	1,778,420,579

TABLE B-17: UNIT VARIABLE OMP&amp;R COMPONENT

(in dollars per acre-foot)<sup>(b)</sup>

Sheet 1 of 3

Calendar Year	NORTH BAY AQUEDUCT				SOUTH BAY AQUEDUCT		CALIFORNIA AQUEDUCT			
	Reach 1		Reach 3		Reach 1		Reach 1		Reach 4	
	Calhoun and Travis Pumping Plants		Cordelia Pumping Plant(c)		South Bay and Del Valle Pumping Plant (d)		Delta Pumping Plant		Dos Amigos Pumping Plant	
	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1962	0	0	0	0	4 1504604	4 1504604	0	0	0	0
1963	0	0	0	0	4 5633057	4 5633057	0	0	0	0
1964	0	0	0	0	3 5433026	3 5433026	0	0	0	0
1965	0	0	0	0	4 1891495	4 1891495	0	0	0	0
1966	0	0	0	0	3 5059458	3 5059458	0	0	0	0
1967	0	0	0	0	3 9293202	5 1887239	1 2594037	1 2594037	0	0
1968	0	0	5 7570016	5 7570016	3 3309386	4 7866426	1 4557040	1 4557040	1 0630077	2 5187117
1969	0	0	3 1823595	3 1823595	3 6892357	4 6975811	1 0083454	1 0083454	6944506	1 7027960
1970	0	0	3 7584301	3 7584301	4 4145266	5 3540762	9395496	9395496	7782945	1 7178441
1971	0	0	4 2082507	4 2082507	3 8631218	4 7414795	8783577	8783577	4116446	1 2900023
1972	0	0	3 9577735	3 9577735	4 3226200	5 2196418	8970218	8970218	5518236	1 4488474
1973	0	0	3 8103903	3 8103903	5 2470291	6 1616426	9146135	9146135	5795166	1 4941301
1974	0	0	3 5878850	3 5878850	6 3423834	7 2192653	8768819	8768819	5586930	1 4355749
1975	0	0	2 3358187	2 3358187	4 2944746	5 2308424	9363678	9363678	5093008	1 4456686
1976	0	0	3 3364226	3 3364226	3 8237866	4 7375568	9137702	9137702	4625801	1 3763503
1977	0	0	2 5664528	2 5664528	4 2738414	5 4781080	1 2042666	1 2042666	4700016	1 6742682
1978	0	0	2 7297543	2 7297543	5 0649350	5 9916161	9266811	9266811	6477648	1 5744459
1979	0	0	2 3423423	2 3423423	4 1955614	5 8294110	1 6338496	1 6338496	5657135	2 1995631
1980	0	0	3 2114184	3 2114184	4 9000074	6 0555013	1 1554939	1 1554939	6751069	1 8306008
1981	9299158	9299158	4 1025641	5 0324799	5 4101460	7 0559297	1 6457837	1 6457837	5940073	2 2397910
1982	9696689	9696689	4 5964912	5 5661601	5 9811422	6 9231404	9419982	9419982	6491216	1 5911198
1983	4 5871570	4 5871570	20 3235294	24 9106864	29 9605941	36 6631266	6 7025325	6 7025325	3 2991782	10 0017107
1984	4 4476915	4 4476915	29 5189873	33 9666788	30 3857312	35 9855873	5 5998561	5 5998561	3 330536	8 9329097
1985	5 7338644	5 7338644	26 8351648	32 5690292	30 1254664	37 0287929	6 9033265	6 9033265	3 5945276	10 4978541
1986	4 9155032	4 9155032	23 9574468	28 8729500	27 4971843	35 3911139	7 8939296	7 8939296	3 4187933	11 3127229
1987	4 3847609	4 3847609	22 2886598	26 6734207	26 0021956	35 5060907	9 5038951	9 5038951	3 3381747	12 8420698
1988	5 1239542	5 1239542	22 2200000	27 3439542	26 0840197	34 3456686	8 2616489	8 2616489	3 6136246	11 8752735
1989	4 7851381	4 7851381	22 2524272	27 0375653	26 0596554	33 0755320	7 0158766	7 0158766	3 8869490	10 9028256
1990	5 6312577	5 6312577	21 8878505	27 5191082	25 7062461	33 2113292	7 5050831	7 5050831	4 0592269	11 5643100
1991	5 6573770	5 6573770	21 7454545	27 4028315	25 5718765	33 0422722	7 4703957	7 4703957	4 1597169	11 6301126
1992	5 4150203	5 4150203	20 4561404	25 8711607	24 2421770	32 3101438	8 0679668	8 0679668	3 9883314	12 0562982
1993	5 5206263	5 5206263	20 4444444	25 9650707	24 2186133	32 0182428	7 7996295	7 7996295	4 1606114	11 9602409
1994	5 3996192	5 3996192	19 6859504	25 0855696	23 5618059	31 1337167	7 5719108	7 5719108	4 0883671	11 6602779
1995	5 3488446	5 3488446	19 2096774	24 5585220	23 3716236	31 7035569	8 3319333	8 3319333	4 0255362	12 3574695
1996	5 2692292	5 2692292	18 6093750	23 8786042	22 9158277	30 1551775	7 2393498	7 2393498	4 1216235	11 3609733
1997	5 1717647	5 1717647	18 0454545	23 2172192	22 7686136	31 2305928	8 4619792	8 4619792	4 0326009	12 4945801
1998	5 0378794	5 0378794	22 9558824	27 9937618	22 0541796	30 4521006	8 3979210	8 3979210	3 9175617	12 3154827
1999	5 2443629	5 2443629	23 5142857	28 7586486	23 6796302	31 2662105	7 5865803	7 5865803	4 1120184	11 6985987
2000	5 2611877	5 2611877	23 1388889	28 4000766	23 7618352	31 5403821	7 7785469	7 7785469	4 2231138	12 0016607
2001	5 0278286	5 0278286	21 8503401	26 8781687	22 0720350	30 7732633	8 7012283	8 7012283	4 0404874	12 7417157
2002	5 2029545	5 2029545	22 3466667	27 5496212	22 7505610	30 7877047	8 0371437	8 0371437	4 1798604	12 2170041
2003	5 0825612	5 0825612	21 5816993	26 6642605	22 9148102	31 3175306	8 4027204	8 4027204	4 0775298	12 4802502
2004	5 0547378	5 0547378	21 1666667	26 2214045	22 7400540	31 1027975	8 3627435	8 3627435	4 0488528	12 4115963
2005	5 0635196	5 0635196	20 9559748	26 0194944	23 5596989	31 6735452	8 1138463	8 1138463	4 0550775	12 1689238
2006	5 0450462	5 0450462	20 6257669	25 6708131	23 5684549	31 9352766	8 3668217	8 3668217	4 0635965	12 4304182
2007	4 8837248	4 8837248	19 7125749	24 5962997	22 8970236	31 5961767	8 6991531	8 6991531	3 9272788	12 6264319
2008	5 0000000	5 0000000	20 0117647	25 0117647	23 4657799	32 0458726	8 5800927	8 5800927	4 0998775	12 6799702
2009	4 7526449	4 7526449	18 7471264	23 4997713	22 3961354	30 8717121	8 4755767	8 4755767	3 8997004	12 7352771
2010	6 3508813	6 3508813	19 5056180	25 8564993	24 2946702	32 6342030	8 3395328	8 3395328	4 1442668	12 4837996
2011	6 2195179	6 2195179	18 8571429	25 0766608	23 0770000	31 8190538	8 7420538	8 7420538	4 0917264	12 8337802
2012	5 9515603	5 9515603	17 8602151	23 8117754	22 7262926	31 2138171	8 9375245	8 9375245	3 9307458	12 8682703
2013	6 1168310	6 1168310	18 1157895	24 2326205	22 8482287	31 9845803	9 1363516	9 1363516	4 0629725	13 1993241
2014	6 1158464	6 1158464	17 8564103	23 9722567	22 9886170	31 8943352	8 9057182	8 9057182	4 0744433	12 9801615
2015	6 0810727	6 0810727	21 6600000	27 7410727	23 1133989	31 7495484	8 6361495	8 6361495	4 0292922	12 6654417
2016	6 1139108	6 1139108	21 5219512	27 6358620	23 2745798	31 6554739	8 3808941	8 3808941	4 1128033	12 4936974
2017	6 0963435	6 0963435	21 1523810	27 2487245	23 2849787	31 6698582	8 3848795	8 3848795	4 1586519	12 5435314
2018	6 0625970	6 0625970	20 7534884	26 8160854	23 2537819	31 6364032	8 3826213	8 3826213	4 1035950	12 4860143
2019	5 9803846	5 9803846	20 2818182	26 2622028	23 0354096	31 9271885	8 8917789	8 8917789	4 2372759	13 1290548
2020(e)	5 8567038	5 8567038	18 5680000	24 4247038	23 1965851	31 8830950	8 6865099	8 6865099	4 1848097	12 8713196

- a) Unit rates as shown constitute the rate for the indicated pumping plants, powerplants, and reservoirs. Cumulative unit rates as shown constitute the total rate, cumulative from the Sacramento-San Joaquin Delta, applicable to deliveries from or downstream of the indicated pumping plants and power plants. Excludes extra peaking service costs.
- b) Metric conversion is dollars per acre-foot times 0.8107 equals dollars per cubic dekametre.
- c) For the period 1968 through 1980, rates are for an interim facility.
- d) The relatively minor estimated costs of the Del Valle Pumping Plant have been combined with those of the South Bay Pumping Plant to simplify the allocation procedure.
- e) And each year thereafter for the remainder of the project repayment period.

OF TRANSPORTATION CHARGE <sup>(a)</sup>(in dollars per acre-foot) <sup>(b)</sup>

Sheet 2 of 3

Calendar Year	CALIFORNIA AQUEDUCT (Continued)											
	Reach 14A		Reach 15A		Reach 16A		Reach 17E		Reach 18A		Reach 22B	
	Buena Vista Pumping Plant		Wheeler Ridge Pumping Plant		Wind Gap Pumping Plant		A.D. Edmonston (Tehachapi) Pumping Plant		Cottonwood Powerplant		Pearblossom Pumping Plant	
	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
1962	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0
1970	3333333	2 0511774	0	0	0	0	0	0	0	0	0	0
1971	1 3292714	2 6192737	2 0979730	4 7172467	0	0	0	0	0	0	0	0
1972	1 0139608	2 4628082	9490083	3 4118165	2 0074913	5 4193078	6 6343240	12 0536318	0	0	2 4570792	14 5107110
1973	9243867	2 4185168	1 1228465	3 5413633	1 9675834	5 5089467	6 9945960	12 5035427	0	0	4 0731978	16 5767405
1974	8799039	2 3154788	1 0404913	3 3559701	1 8710417	5 2270118	6 6535271	11 8805389	0	0	3 3225298	15 2030687
1975	8049410	2 2497096	9131640	3 1628736	1 9144785	5 0773521	7 0058987	12 0832508	0	0	3 2240879	15 3073387
1976	8066746	2 1830249	8551210	3 0381459	1 7598968	4 7980427	6 3565985	11 1546412	0	0	2 5191081	13 6737493
1977	9109098	2 5851780	9733881	3 5588661	2 0342795	5 5928456	7 3548581	12 9477037	0	0	3 1041209	16 0518246
1978	9828786	2 5752455	1 1552768	3 7126013	2 3516561	6 042574	8 7158459	14 7801033	0	0	3 6395437	18 4194470
1979	9631477	3 1627108	1 0480139	4 2107247	2 1954340	6 4061587	7 9801775	14 3863362	0	0	3 2095260	17 5956918
1980	1 0382495	2 8688503	1 1912404	4 0600907	2 3358428	6 3959335	8 5165306	14 9124641	0	0	3 6990894	18 6115535
1981	1 0807821	3 3205731	1 2724943	4 5930674	2 4266210	7 0196884	8 8402000	15 8598884	- 2242960	15 6355924	4 0465761	19 6821685
1982	1 1385608	2 7296806	1 2027622	3 9324428	2 5411577	6 4736005	9 2649189	15 7385194	- 4390539	15 2994655	4 5303315	19 8297970
1983	6 0565849	16 0582956	6 5712663	22 6295619	12 4608536	35 0904155	45 4983153	80 5887308	- 2 1447764	78 4439544	22 7550117	101 1989661
1984	6 2051771	15 1380868	6 9734109	22 1114977	14 3796906	36 4911883	47 7657426	84 2569309	- 2 2010729	82 0558580	23 5712677	105 6271257
1985	6 5905440	17 0883981	6 8198790	23 9082771	14 0574624	37 9657395	46 6912281	84 6569676	- 1 5974624	83 0595052	22 6421809	105 7016861
1986	6 5261588	17 8388817	6 4746308	24 3135125	13 1097328	37 4232453	48 8175428	86 2407881	- 1 5388131	84 7019750	20 7398410	105 4418160
1987	6 9251235	18 1671333	6 4767277	24 7903402	13 7004398	39 2248058	46 2468010	85 4717068	- 1 2545117	84 2171949	20 9121412	105 1293361
1988	6 4218095	18 2970830	6 4425809	24 7396639	13 4521884	38 1918523	49 7602853	87 9521376	- 1 9352630	86 0168746	20 5894067	106 6062813
1989	6 5804858	17 4833114	6 8174356	24 3007470	13 9479841	38 2487311	51 9353020	90 1840331	- 1 8240763	88 3599568	21 3759260	107 7558828
1990	6 7951160	18 3594260	7 1557694	25 5151954	14 7812228	40 2964182	50 4673975	90 7638157	- 1 6734342	89 0903815	20 5256452	109 6160267
1991	6 7751850	18 4052976	7 1257588	25 5310564	14 7124861	40 2435425	50 2046251	90 4481676	- 1 9350748	88 5130928	21 3199653	109 8330581
1992	6 7280343	18 7843325	7 2657771	26 0501096	14 7585220	40 8086316	50 9545838	91 7632154	- 1 7854406	89 9777748	20 3050159	110 2827907
1993	6 8007219	18 7609628	7 3313671	26 0923299	14 8760744	40 9684043	51 2877882	92 2561125	- 1 7756868	90 4805057	20 8736463	111 9541520
1994	6 5637467	18 2240246	7 0735887	25 2976133	14 5129666	39 8105799	53 3591223	93 1697022	- 2 0732792	91 0964420	20 3094825	111 4059055
1995	6 6994254	19 0568949	7 2937623	26 3506572	14 9389923	41 2896495	51 5270916	92 8167411	- 1 7698778	91 0468633	19 9843224	111 0311857
1996	6 9649957	18 3259690	7 1817202	25 5076892	15 6228476	41 1305368	54 3066235	95 4371603	- 1 8762036	93 5609567	19 9222983	113 4832550
1997	6 4962441	18 9908242	7 0724275	26 0632517	14 4885540	40 5518057	49 9975049	90 5493106	- 1 8534267	88 6958839	19 8508058	108 5461452
1998	6 5888175	18 9043002	7 3184415	26 227417	14 7770471	40 9978888	51 3922007	92 3919895	- 2 0221961	90 3697934	19 8205058	109 6205992
1999	6 8408804	18 5394791	7 5916396	26 1311187	15 3165498	41 4476685	53 2220492	94 6697177	- 1 9066531	92 7630646	20 125230	112 8845572
2000	7 0980643	19 0997250	7 4976711	26 5973961	15 1266260	41 7240221	52 5518540	94 2758761	- 2 0476530	92 2282231	20 1522907	112 3805138
2001	6 5193241	19 2610398	7 2329208	26 4939606	14 6065182	41 1004788	50 7952224	91 8957012	- 2 0202007	89 8755005	19 3789042	109 2544047
2002	6 7473971	18 9644012	7 4835438	26 4479450	15 1034341	41 5513791	52 4944382	94 0458173	- 2 0506223	91 9951950	20 4097347	112 4049297
2003	6 8331224	19 3133726	7 2135672	26 5263998	14 6867121	41 2136519	53 9173993	95 133912	- 1 8656447	93 2677465	19 6517705	112 9185170
2004	6 7753617	19 1869580	7 1537394	26 3406974	15 3999247	41 7406221	53 4679213	95 2085434	- 2 2045100	93 0040334	19 5484798	112 5525132
2005	6 7800792	18 9490030	7 1604998	26 1095028	15 4099420	41 5194448	53 5119841	95 0314289	- 1 9785483	93 0528806	19 7045981	112 7574787
2006	6 7373675	19 1677857	7 1991341	26 3669198	15 3048112	41 6717310	53 1440375	94 8157685	- 2 2020511	92 6137174	19 6232143	112 2369317
2007	6 5560727	19 1825046	7 0113420	26 1938466	14 9043782	41 0982248	51 7805086	92 8787334	- 1 9894920	90 8892414	19 2199817	110 1092231
2008	6 7111675	19 3911377	7 1685604	26 5596981	15 2393628	41 7990609	52 9056482	94 7047091	- 1 8559085	92 8488006	19 6261354	112 4749360
2009	6 3731908	18 7484679	7 1148398	25 8633077	14 4819922	40 3452999	53 3422070	93 6875069	- 2 1923334	91 4951735	18 8917862	110 3869597
2010	6 7037341	19 1875337	7 4776462	26 6651799	15 2074199	41 8725998	52 7748176	94 6474174	- 2 3157638	92 3316536	19 7454995	112 0771531
2011	6 8440092	19 6777894	7 2749676	26 9527570	14 7805008	41 7332578	54 4772082	96 2104660	- 1 6728857	94 5375803	19 4182798	113 9558601
2012	6 5880149	19 4562872	7 0176545	26 4739417	15 033282	41 5072699	52 5748355	94 0821054	- 1 9771019	92 1050035	18 7033903	110 8083938
2013	6 7253651	19 9246892	7 1514480	27 0761372	15 3229704	42 3991076	53 5438365	95 9429441	- 2 1984120	93 7445321	19 1822740	112 9248061
2014	6 7440257	19 7261872	7 2553331	26 9815203	15 3667653	42 3482856	53 6956274	96 0439130	- 2 2899301	93 7539829	19 2929305	113 0469134
2015	6 7224138	19 3878555	7 1551401	26 5429956	15 3212744	41 8642700	53 5651190	95 4293890	- 2 2427413	93 1866477	19 4031147	112 5897624
2016	6 7976483	19 2913457	7 2251943	26 5165400	15 4780773	41 9946173	50 769268	96 0715441	- 2 1160937	93 9554504	19 5421859	113 4976363
2017	6 7866417	19 3301731	7 2937490	26 6239221	15 4463259	42 0702480	53 9536187	96 0238667	- 1 6910660	94 3328007	19 5401035	113 8729042
2018	6 7767291	19 2627434	7 6822132	26 9449566	15 4245331	42 3694897	53 8798979	96 2493876	- 2 2828714	93 9665162	19 5624808	113 5289970
2019	7 2122824	20 3413372	8 196088	28 1609460	15 685079	43 8444539	54 7605811	98 6050350	- 2 2967091	96 3083259	19 5262368	115 8345627
2020(e)	7 0746132	19 9459348	7 6628097	27 6087445	15 3733637	42 9821082	53 6868309	96 6507391	- 2 0986613	94 5520778	19 4265832	115 9786610

TABLE B-17: UNIT VARIABLE OMP&amp;R COMPONENT OF TRANSPORTATION CHARGE (a)

(in dollars per acre-foot)<sup>(b)</sup>

Sheet 3 of 3

Calendar Year	CALIFORNIA AQUEDUCT (continued)											
	Reach 26A		Reach 29A		Reach 29G		Reach 29J		Reach 31A		Reach 33	
	Devil Canyon Powerplant		Oso Pumping Plant		Pyramid Powerplant		Castaic Powerplant		Las Perillas and Badger Hill Pumping Plants		Devil's Den, Sawtooth, and Polonio Pumping Plants and San Luis Obispo Powerplant	
	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate	Unit Rate	Cumulative Unit Rate
1962	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)
1963	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	1 5011956	4 0199073	0	0
1969	0	0	0	0	0	0	0	0	1 2616815	2 9644775	0	0
1970	0	0	0	0	0	0	0	0	1 6307308	3 3485749	0	0
1971	0	0	0	0	0	0	0	0	1 4978147	2 7878170	0	0
1972	-2 3717647	12 1389463	1 2631301	13 3167619	0	0	-2 9350830	10 3816789	1 7485935	3 1974409	0	0
1973	-8 6746314	7 9021091	9091471	13 4126898	0	0	-5 8335963	7 5790935	1 4587196	2 9528497	0	0
1974	-5 2082175	9 9948512	8470684	12 7276073	0	0	-6 1952270	6 5323803	1 4225957	2 8581706	0	0
1975	-6 3092956	8 9980431	9580370	13 0412878	0	0	-5 9182724	7 1230154	1 0228596	2 4685282	0	0
1976	-4 4345377	9 2392116	8296643	11 9843055	0	0	-6 7614179	5 2228876	1 6260255	3 0023758	0	0
1977	-5 0433266	11 0084980	1 0113951	13 9509888	0	0	-11 6431448	2 3159540	1 6737333	3 3480015	0	0
1978	-6 1389141	12 2807329	9986732	15 7787765	0	0	-11 5427141	4 2360624	2 0632057	3 6376516	0	0
1979	-6 7548245	10 8408673	1 0185727	15 4049089	0	0	-14 0495316	1 3553773	1 5542741	3 7538372	0	0
1980	-6 3018675	12 3096860	1 0107480	15 9232121	- 7120217	15 2111904	-12 0218379	1 1893525	1 8744710	3 7050718	0	0
1981	-5 8216478	13 8605207	1 0242331	16 8841215	-4 3293480	12 5547735	-13 0862029	- 5314294	2 0421998	4 2819908	0	0
1982	-5 9763842	13 8534128	1 0172216	16 7557410	-4 2934434	12 4622976	-11 2211575	1 2411401	2 2102521	3 8013719	41 5000000	45 3013719
1983	-28 8877346	72 3112315	4 4369055	85 0256363	-24 5503284	60 4753079	-25 5349831	34 9403248	10 9307145	20 9324256	49 7390602	89 3456379
1984	-29 2860990	76 3410267	3 9534261	88 2103570	-26 6479588	61 5623982	-26 6480770	34 9143212	11 1333560	20 0662457	79 2280537	99 2942994
1985	-25 3722478	80 3294399	3 8484448	88 5054124	-24 9748963	63 5305161	-23 7547183	39 7757978	11 3238469	21 8217010	62 9509587	84 7726597
1986	-25 3335305	80 1082855	3 8302532	90 0710413	-24 6975613	65 3734800	-23 1775924	42 1958876	9 9372553	21 2499782	54 0606927	75 3106709
1987	-26 4900585	78 6392776	4 5019660	89 9736728	-25 0270993	64 9465755	-25 1694676	39 7771059	9 2781391	22 1202089	54 8869216	77 0071305
1988	-25 2692697	81 3370116	4 3781456	92 3302832	-24 1160077	68 2142755	-23 3150755	44 8992000	9 5399224	21 4151959	57 7361666	79 1513625
1989	-25 3204079	84 4154749	5 2770182	95 4610513	-23 4993710	71 9616803	-22 1082389	49 8534414	9 4463751	20 3491971	50 3528012	70 7019983
1990	-24 8983113	84 777154	5 6878445	95 416602	-23 677859	71 8238743	-22 8579422	48 6379422	10 3532275	21 9153375	52 6435550	74 5610925
1991	-25 5893376	84 24 005	6 0849066	96 5330742	-23 9877701	72 5453041	-22 7082645	49 8370396	10 3937493	22 0238619	51 8411570	73 8650189
1992	-24 3540253	85 9287654	6 6813305	98 4445459	-24 3972596	74 0472863	-23 5044876	50 5448376	9 9833510	23 0195952	49 7390602	71 7789194
1993	-25 6916024	85 6625496	6 6573005	98 9134930	-23 2772545	75 6362385	-21 7373176	53 8989209	10 1447170	22 1049579	49 4771629	71 5821208
1994	-25 7746008	85 6313047	6 3623543	99 5320565	-23 4346823	76 0973742	-21 9672051	54 1301691	9 9314412	21 5917191	48 0341643	69 6258834
1995	-25 7726478	85 2585379	6 4414169	99 2581580	-22 7225002	76 5356578	-22 0609965	54 4746613	9 8556605	22 2131300	54 4398988	76 6530288
1996	-23 9678395	89 5154155	6 7641682	102 2013285	-21 5384743	80 6628542	-21 2171146	59 4457396	9 7411515	21 1021248	53 8747905	74 9769153
1997	-26 2817038	82 2644414	6 5948279	97 1441385	-21 6953006	75 4488379	-20 8674182	54 5814197	10 0048622	22 4994423	52 3434332	74 8428755
1998	-25 9992593	83 6213399	7 1528323	99 5448218	-21 5329673	78 0118545	-22 6916281	55 3202264	9 7574561	22 0729388	49 9365340	72 0094728
1999	-26 1542659	86 7303217	6 9537051	101 6250882	-21 3152848	80 3098034	-21 3870655	58 9227379	10 1805738	21 8791725	51 9838748	73 8630473
2000	-26 1496918	86 2308220	7 2195588	101 4958349	-20 2677819	81 2280530	-21 3413346	59 8867184	10 2133609	22 2150216	52 6405457	74 2555673
2001	-26 7775705	82 4768342	6 9885992	98 8843004	-20 8116247	78 0726757	-21 9001675	56 1725082	9 7315372	22 4732529	48 8517033	71 3249562
2002	-26 4275590	85 9773707	7 1546334	101 2004507	-19 7888363	81 4116144	-21 1347176	60 2768968	10 0425274	22 2595315	50 5412274	72 8007589
2003	-24 9928711	87 9266459	7 2149334	102 3483246	-19 0752937	83 2730309	-22 3714827	60 9015482	9 8075903	22 2878405	49 2983985	71 5862390
2004	-27 1046409	85 4478723	7 1328370	102 3413804	-20 0676314	82 2737490	-22 1864418	60 0873072	9 7042703	21 1158666	47 4839379	69 5980845
2005	-25 6784790	87 0789997	7 1557360	102 1871649	-18 9657699	83 2213950	-22 1662998	61 0550952	9 7204437	21 8893675	47 8774970	69 7668645
2006	-27 3188318	84 9180999	7 0224845	101 8382530	-19 4668343	82 3714187	-21 6519690	60 7194497	9 7393972	22 1698154	47 5948126	69 7646280
2007	-27 2303586	82 8788645	6 8144734	99 6932068	-19 3481240	80 3450828	-22 4615686	57 8835142	9 4503689	22 0768008	46 0282709	68 1050717
2008	-27 0517818	85 4231542	7 3468794	102 0515885	-19 2723801	82 7792084	-22 1365684	60 6426400	9 7299204	22 4098906	47 2532406	69 6613121
2009	-26 9711379	83 4158218	6 9089416	100 5964485	-18 7171285	81 8793200	-21 1121260	60 6681040	9 2703159	21 6495930	45 2626602	66 9082532
2010	-27 1865823	84 8905708	6 589041	102 3063215	-18 9354896	83 3708319	-21 6351762	61 7356557	9 8152110	22 2990106	47 9128416	70 2118522
2011	-27 9744204	85 9814397	7 4078800	103 6183460	-18 4072593	85 2110867	-21 8421346	63 3689521	9 6683241	22 5021043	46 4169649	68 9190692
2012	-28 1070639	82 7013299	7 1343536	101 2164590	-18 6505022	82 5659568	-21 8774541	60 6885027	9 2703159	22 1385862	44 7679565	66 9065427
2013	-28 1951888	84 7316173	7 5981787	103 5411228	-18 1484475	85 3926755	-21 7852387	63 6074366	9 5546082	22 7539323	45 8869287	68 6408610
2014	-28 4611122	84 5858012	7 2478664	103 2917794	-17 0914551	85 1998213	-22 0281805	63 1716408	9 6114685	22 5916300	46 3462878	68 9379178
2015	-28 6549281	83 9348343	7 1739818	102 6033708	-17 7141959	84 8892149	-20 7924559	64 0967590	9 6256812	22 2911229	46 4640750	68 7551979
2016	-28 6624797	84 8351566	7 2713079	103 3428520	-17 9702609	85 3725911	-21 7081353	63 6644558	9 7346612	22 2283586	46 7820919	69 0104505
2017	-27 8148443	86 0580599	7 8006170	103 6244837	-17 5768507	86 0476330	-21 8011789	64 2464541	9 7536147	22 2971461	46 9823337	69 2794798
2018	-28 7422723	84 7867247	7 2261646	103 4755522	-18 1947648	85 2807874	-21 6914684	63 5893188	9 7346612	22 2206755	46 8094590	69 0263345
2019	-28 2665431	87 5680196	7 091092	105 6694442	-18 8324065	86 8645377	-22 1288136	64 7357241	9 6872776	22 8163324	46 1460580	68 9623904
2020 (e)	-26 4560352	87 5226258	7 2218455	103 8725846	-18 0276732	85 8449114	-22 1230965	63 7218149	9 7488739	22 6201935	46 7703144	69 3905079

TABLE B-18: VARIABLE OMP&amp;R COMPONENT OF TRANSPORTATION CHARGE

FOR EACH CONTRACTOR<sup>(a)</sup>

(in dollars)

Sheet 1 of 4

Calendar Year	NORTH BAY AREA			SOUTH BAY AREA				CENTRAL COASTAL AREA		
	Napa County FC & WCD	Solano County FC & WCD	Total	Alameda County FC & WCD, Zone 7	Alameda County Water District	Santa Clara Valley Water District	Total	San Luis Obispo County FC & WCD	Santa Barbara County FC & WCD	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1962	0	0	0	2,050	34,914	0	36,964	0	0	0
1963	0	0	0	7,899	49,804	0	57,703	0	0	0
1964	0	0	0	5,928	68,166	0	74,094	0	0	0
1965	0	0	0	10,913	68,731	62,896	142,540	0	0	0
1966	0	0	0	19,321	52,112	121,089	192,522	0	0	0
1967	0	0	0	19,421	57,227	160,923	237,571	0	0	0
1968	6,989	0	6,989	29,357	118,790	335,567	483,714	0	0	0
1969	8,551	0	8,551	31,168	3,819	292,491	327,478	0	0	0
1970	13,598	0	13,598	49,520	0	429,991	479,511	0	0	0
1971	10,609	0	10,609	23,788	28,264	415,382	467,434	0	0	0
1972	14,434	0	14,434	54,749	144,432	523,353	722,534	0	0	0
1973	14,449	0	14,449	18,331	15,534	545,810	579,675	0	0	0
1974	17,473	0	17,473	9,486	29	635,296	644,811	0	0	0
1975	15,977	0	15,977	24,156	5,157	460,314	489,627	0	0	0
1976	18,000	0	18,000	81,486	100,910	416,905	599,301	0	0	0
1977	14,000	0	14,000	100,798	121,614	482,073	704,485	0	0	0
1978	15,000	0	15,000	117,436	138,406	527,262	783,104	0	0	0
1979	13,000	0	13,000	121,252	139,323	512,988	773,563	0	0	0
1980	18,000	0	18,000	133,221	150,176	532,884	816,281	0	0	0
1981	28,459	7,439	35,898	162,286	183,454	620,922	966,662	0	0	0
1982	31,727	9,115	40,842	166,155	188,309	609,237	963,701	45,301	0	45,301
1983	169,393	47,385	216,778	916,578	1,041,233	3,226,355	5,184,166	268,038	616,484	884,522
1984	268,337	49,636	317,973	935,625	1,065,174	3,166,731	5,167,530	446,824	1,032,662	1,479,486
1985	296,378	73,795	370,173	999,778	1,140,486	3,258,534	5,398,798	412,419	1,466,568	1,878,987
1986	271,406	74,912	346,318	990,951	1,136,055	3,114,418	5,241,424	419,405	1,739,677	2,159,082
1987	258,732	80,329	339,061	1,029,677	1,182,353	3,124,536	5,336,566	483,066	2,217,804	2,700,870
1988	273,440	127,586	401,026	1,030,370	1,184,926	3,022,418	5,237,714	552,239	2,833,619	3,385,858
1989	278,487	150,014	428,501	1,025,341	1,180,797	2,976,798	5,182,936	543,063	3,259,362	3,802,425
1990	294,454	212,862	507,316	1,062,763	1,225,498	3,055,443	5,343,704	625,195	4,190,334	4,815,529
1991	301,431	213,849	515,280	1,083,787	1,268,823	3,105,973	5,458,583	694,627	4,262,012	4,956,639
1992	294,931	204,688	499,619	1,085,621	1,289,175	3,101,774	5,476,570	748,151	4,141,644	4,889,795
1993	303,791	208,680	512,471	1,101,427	1,325,556	3,137,788	5,564,771	819,043	4,130,288	4,949,331
1994	303,535	204,106	507,641	1,095,907	1,307,616	3,113,371	5,516,894	867,609	4,017,413	4,885,022
1995	304,526	202,186	506,712	1,141,328	1,331,549	3,170,356	5,643,233	1,033,282	4,422,880	5,456,162
1996	305,646	199,177	504,823	1,109,710	1,266,518	3,015,518	5,391,746	1,086,490	4,326,167	5,412,657
1997	306,467	195,493	501,960	1,174,270	1,311,685	3,123,059	5,609,014	1,160,214	4,318,434	5,478,648
1998	380,715	190,432	571,147	1,169,360	1,278,989	3,045,210	5,493,559	1,189,093	4,154,946	5,344,039
1999	402,621	198,237	600,858	1,225,636	1,313,180	3,126,621	5,665,437	1,294,375	4,261,894	5,556,273
2000	408,961	198,873	607,834	1,261,615	1,324,696	3,154,039	5,740,350	1,376,327	4,288,546	5,660,873
2001	395,109	190,052	585,161	1,255,549	1,292,477	3,077,327	5,625,353	1,414,160	4,115,450	5,529,610
2002	413,244	196,672	609,916	1,280,768	1,293,084	3,078,770	5,652,622	1,537,478	4,200,604	5,738,082
2003	407,963	192,121	600,084	1,327,863	1,315,336	3,131,753	5,774,952	1,604,319	4,130,526	5,734,845
2004	409,054	191,069	600,123	1,343,641	1,306,317	3,110,280	5,760,238	1,649,724	4,015,908	5,665,632
2005	413,710	191,401	605,111	1,393,636	1,330,289	3,167,355	5,891,280	1,744,171	4,025,549	5,769,720
2006	418,434	190,703	609,137	1,417,926	1,341,282	3,193,528	5,952,736	1,744,116	4,025,420	5,769,536
2007	410,758	184,605	595,363	1,415,509	1,327,039	3,159,617	5,902,165	1,702,627	3,929,662	5,632,289
2008	425,200	189,000	614,200	1,448,473	1,345,927	3,204,587	5,998,987	1,741,578	4,019,562	5,761,140
2009	408,896	179,650	588,546	1,407,750	1,296,612	3,087,171	5,791,533	1,672,707	3,860,606	5,533,313
2010	460,246	240,063	700,309	1,501,174	1,370,636	3,263,420	6,135,230	1,755,296	4,051,224	5,806,520
2011	456,395	235,098	691,493	1,463,676	1,336,400	3,181,905	5,981,981	1,722,976	3,976,631	5,699,607
2012	442,899	224,969	667,868	1,435,835	1,310,980	3,121,382	5,868,197	1,672,664	3,860,507	5,533,171
2013	460,420	231,216	691,636	1,471,291	1,343,353	3,198,457	6,013,101	1,716,021	3,960,578	5,676,599
2014	467,459	231,179	698,638	1,467,139	1,339,562	3,189,434	5,996,135	1,723,448	3,977,718	5,701,166
2015	554,821	229,865	784,686	1,460,479	1,333,481	3,174,955	5,968,915	1,718,880	3,967,175	5,686,055
2016	566,535	231,106	797,641	1,456,152	1,329,530	3,165,547	5,951,229	1,725,261	3,981,904	5,707,165
2017	572,223	230,442	802,665	1,456,813	1,330,134	3,166,986	5,953,933	1,731,986	3,997,427	5,729,413
2018	576,546	229,166	805,712	1,455,275	1,328,729	3,163,640	5,947,644	1,725,659	3,982,820	5,708,479
2019	577,768	226,059	803,827	1,468,651	1,340,942	3,192,719	6,002,312	1,724,059	3,979,131	5,703,190
2020	610,618	221,383	832,001	1,466,622	1,339,090	3,188,309	5,994,021	1,734,763	4,003,833	5,738,596
2021	610,618	221,383	832,001	1,466,622	1,339,090	3,188,309	5,994,021	1,734,763	4,003,833	5,738,596
2022	610,618	221,383	832,001	1,466,622	1,339,090	3,188,309	5,994,021	1,734,763	4,003,833	5,738,596
2023	610,618	221,383	832,001	1,466,622	1,339,090	3,188,309	5,994,021	1,734,763	4,003,833	5,738,596
2024	610,618	221,383	832,001	1,466,622	1,339,090	3,188,309	5,994,021	1,734,763	4,003,833	5,738,596
2025	610,618	221,383	832,001	1,466,622	1,339,090	3,188,309	5,994,021	1,734,763	4,003,833	5,738,596
2026	610,618	221,383	832,001	1,466,622	1,339,090	3,188,309	5,994,021	1,734,763	4,003,833	5,738,596
2027	610,618	221,383	832,001	1,466,622	1,339,090	3,188,309	5,994,021	1,734,763	4,003,833	5,738,596
2028	610,618	221,383	832,001	1,466,622	1,339,090	3,188,309	5,994,021	1,734,763	4,003,833	5,738,596
2029	610,618	221,383	832,001	1,466,622	1,339,090	3,188,309	5,994,021	1,734,763	4,003,833	5,738,596
2030	610,618	221,383	832,001	1,466,622	1,339,090	3,188,309	5,994,021	1,734,763	4,003,833	5,738,596
2031	610,618	221,383	832,001	1,466,622	1,339,090	3,188,309	5,994,021	1,734,763	4,003,833	5,738,596
2032	610,618	221,383	832,001	1,466,622	1,339,090	3,188,309	5,994,021	1,734,763	4,003,833	5,738,596
2033	610,618	221,383	832,001	1,466,622	1,339,090	3,188,309	5,994,021	1,734,763	4,003,833	5,738,596
2034	610,618	221,383	832,001	1,466,622	1,339,090	3,188,309	5,994,021	1,734,763	4,003,833	5,738,596
2035	610,618	221,383	832,001	1,466,622	1,339,090	3,188,309	5,994,021	1,734,763	4,003,833	5,738,596
TOTAL	24,271,085	10,405,358	34,676,443	71,022,017	70,481,030	174,766,102	316,269,149	73,848,099	199,796,468	273,644,567

a) Unadjusted for prior overpayments or underpayments of charges.

TABLE B-18: VARIABLE OMP&amp;R COMPONENT OF

(in dollars)

Sheet 2 of 4

Calendar Year	SAN JOAQUIN VALLEY AREA									
	Devil's Den Water District	Dudley Ridge Water District	Empire West Side Irrigation District	Hacienda Water District(b)	Kern County Water Agency(b)		County of Kings	Oak Flat Water District	Tulare Lake Basin Water Storage District	Total
	(11)	(12)	(13)	(14)	Municipal and Industrial	Agricultural	(17)	(18)	(19)	(20)
1962	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0
1968	29,675	66,393	4,982	0	0	428,416	2,267	4,489	63,219	599,441
1969	29,556	53,425	95	4,840	0	306,272	170	3,041	12,057	409,456
1970	39,308	69,413	6,772	16,454	0	468,796	0	5,554	0	606,297
1971	34,820	52,958	7,727	8,590	0	754,491	4,773	6,335	149,416	1,019,110
1972	44,460	61,493	8,396	8,487	0	1,105,348	2,029	7,325	365,895	1,603,433
1973	27,810	32,956	4,483	4,333	0	741,099	2,241	2,940	71,067	886,929
1974	27,724	47,934	4,307	4,738	45,408	655,573	2,153	3,044	99,039	889,920
1975	26,414	58,629	4,337	5,433	32,625	793,646	2,313	3,348	119,267	1,046,012
1976	35,127	38,951	4,129	5,368	46,110	823,761	2,202	3,198	69,919	1,028,765
1977	42,519	50,898	5,023	7,032	97,262	1,039,873	2,846	4,456	91,750	1,603,659
1978	46,199	51,169	4,723	7,243	102,778	1,195,842	2,992	3,614	92,420	1,506,980
1979	47,674	76,105	6,599	10,778	129,622	1,602,101	4,399	6,535	137,693	2,021,506
1980	47,055	67,183	5,491	9,520	122,301	1,599,510	4,027	4,853	121,735	1,981,675
1981	54,381	86,903	6,719	12,542	149,276	2,034,003	5,151	7,077	157,681	2,513,733
1982	48,277	65,236	4,773	9,388	129,325	1,749,341	3,978	4,239	118,220	2,132,777
1983	265,842	429,074	30,006	62,011	869,267	10,751,552	28,005	30,832	782,134	13,248,723
1984	254,841	402,875	26,799	58,064	881,567	10,761,591	27,692	26,879	733,392	13,173,700
1985	277,136	495,499	31,494	72,435	1,016,381	12,807,849	35,692	33,826	902,815	15,673,127
1986	269,875	557,718	33,938	81,451	1,117,957	14,005,239	41,858	40,259	1,018,145	17,166,440
1987	280,926	660,082	38,527	96,315	1,274,327	16,105,453	51,369	49,420	1,205,871	19,762,290
1988	271,973	635,327	35,626	92,627	1,306,384	15,967,055	47,501	44,613	1,161,401	19,562,507
1989	258,435	606,197	32,709	89,403	1,336,336	15,611,619	43,612	39,289	1,108,818	19,126,418
1990	278,353	667,260	34,693	98,296	1,479,707	17,144,693	46,257	42,779	1,272,074	21,064,112
1991	279,703	671,058	34,890	98,856	1,481,233	17,208,284	46,521	42,581	1,279,313	21,142,439
1992	279,906	695,649	36,169	102,479	1,512,847	17,303,730	48,225	45,987	1,326,192	21,678,184
1993	280,733	690,106	35,881	101,662	1,512,663	17,577,575	47,841	44,458	1,315,626	21,606,545
1994	274,214	672,798	34,981	99,112	1,478,095	17,115,978	46,641	43,160	1,282,630	21,047,609
1995	282,107	713,026	37,073	105,038	1,536,742	17,948,996	49,430	47,492	1,359,322	22,079,226
1996	267,998	655,528	34,083	96,568	1,494,285	16,950,027	45,443	41,264	1,249,707	20,834,903
1997	285,743	720,937	37,484	106,204	1,524,540	18,011,051	49,978	48,233	1,374,404	22,158,574
1998	280,327	710,603	36,947	104,681	1,527,566	17,856,581	49,262	47,868	1,354,703	21,968,538
1999	277,866	675,009	35,096	99,438	1,512,279	17,361,083	46,794	45,244	1,286,846	21,337,655
2000	282,132	692,496	36,005	102,014	1,535,163	17,741,954	48,006	44,338	1,320,183	21,802,291
2001	285,411	735,197	38,225	108,304	1,548,213	18,279,311	50,967	49,597	1,401,589	22,496,814
2002	282,696	704,921	36,651	103,845	1,536,919	17,860,140	48,868	45,812	1,343,871	22,158,723
2003	283,056	720,110	37,441	106,082	1,548,646	18,090,005	49,921	47,896	1,372,827	22,255,984
2004	280,871	716,149	37,235	105,498	1,552,288	18,021,180	49,646	47,668	1,365,276	22,175,811
2005	277,995	702,147	36,507	103,436	1,536,562	17,761,909	48,675	46,249	1,338,582	21,852,062
2006	281,557	717,236	37,291	105,659	1,550,703	18,035,149	49,721	47,691	1,367,346	22,192,413
2007	280,375	728,545	37,879	107,325	1,545,005	18,124,446	50,506	49,585	1,388,908	22,312,574
2008	284,605	731,634	38,040	107,780	1,564,484	18,291,210	50,720	48,907	1,394,797	22,512,177
2009	274,899	714,054	37,126	105,189	1,519,662	17,770,603	49,501	48,311	1,361,280	21,880,625
2010	283,197	720,315	37,452	106,112	1,555,538	18,117,948	49,935	47,535	1,373,218	22,291,250
2011	285,777	740,510	38,501	109,087	1,576,457	18,473,345	51,335	49,830	1,411,716	22,736,558
2012	281,160	742,499	38,605	109,380	1,566,184	18,383,382	51,473	50,944	1,415,510	22,639,137
2013	288,976	761,601	39,598	112,194	1,602,170	18,842,336	52,797	52,077	1,451,926	23,203,675
2014	286,914	748,955	38,940	110,332	1,591,003	18,629,995	51,921	50,763	1,427,818	22,936,641
2015	283,097	730,796	37,996	107,656	1,566,376	18,269,807	50,662	49,226	1,393,198	22,488,814
2016	282,300	720,887	37,481	106,197	1,562,307	18,131,925	49,975	47,771	1,374,306	22,313,149
2017	283,174	723,762	37,631	106,620	1,565,652	18,191,044	50,175	47,794	1,379,789	22,365,641
2018	282,202	720,443	37,458	106,131	1,567,547	18,165,390	49,944	47,781	1,373,461	22,350,357
2019	289,767	757,547	39,387	111,597	1,633,938	19,004,634	52,516	50,683	1,444,196	23,384,265
2020	287,277	742,676	38,614	109,406	1,601,867	18,660,299	51,485	49,513	1,415,845	22,956,982
2021	287,277	742,676	38,614	109,406	1,601,867	18,660,299	51,485	49,513	1,415,845	22,956,982
2022	287,277	742,676	38,614	109,406	1,601,867	18,660,299	51,485	49,513	1,415,845	22,956,982
2023	287,277	742,676	38,614	109,406	1,601,867	18,660,299	51,485	49,513	1,415,845	22,956,982
2024	287,277	742,676	38,614	109,406	1,601,867	18,660,299	51,485	49,513	1,415,845	22,956,982
2025	287,277	742,676	38,614	109,406	1,601,867	18,660,299	51,485	49,513	1,415,845	22,956,982
2026	287,277	742,676	38,614	109,406	1,601,867	18,660,299	51,485	49,513	1,415,845	22,956,982
2027	287,277	742,676	38,614	109,406	1,601,867	18,660,299	51,485	49,513	1,415,845	22,956,982
2028	287,277	742,676	38,614	109,406	1,601,867	18,660,299	51,485	49,513	1,415,845	22,956,982
2029	287,277	742,676	38,614	109,406	1,601,867	18,660,299	51,485	49,513	1,415,845	22,956,982
2030	287,277	742,676	38,614	109,406	1,601,867	18,660,299	51,485	49,513	1,415,845	22,956,982
2031	287,277	742,676	38,614	109,406	1,601,867	18,660,299	51,485	49,513	1,415,845	22,956,982
2032	287,277	742,676	38,614	109,406	1,601,867	18,660,299	51,485	49,513	1,415,845	22,956,982
2033	287,277	742,676	38,614	109,406	1,601,867	18,660,299	51,485	49,513	1,415,845	22,956,982
2034	287,277	742,676	38,614	109,406	1,601,867	18,660,299	51,485	49,513	1,415,845	22,956,982
2035	287,277	742,676	38,614	109,406	1,601,867	18,660,299	51,485	49,513	1,415,845	22,956,982
TOTAL	15,503,570	37,951,012	2,038,225	5,570,320	80,571,632	948,863,925	2,624,686	2,544,898	72,036,088	1,167,704,356

b) Includes extra peaking service costs.

# TRANSPORTATION CHARGE FOR EACH CONTRACTOR (a)

(in dollars)

Sheet 3 of 4

Calendar Year	SOUTHERN CALIFORNIA AREA									
	Antelope Valley East Kern Water Agency	Castaic Lake Water Agency	Coachella Valley County Water District	Crestline Lake Arrowhead Water Agency	Desert Water Agency	Littlerock Creek Irrigation District	Mojave Water Agency	Palmdale Water District	San Bernardino Valley Municipal Water District	San Gabriel Valley Municipal Water District
	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)
1962	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0
1972	706	0	0	6,731	0	4,075	797	0	15,479	0
1973	267	0	96,146	6,448	149,191	3,626	0	0	256,233	0
1974	14,988	0	97,300	9,532	152,030	4,751	213	0	165,966	6,118
1975	97,513	0	107,151	12,628	168,380	6,284	0	0	124,758	49,039
1976	386,084	0	103,921	12,744	164,084	7,138	0	0	508,156	92,393
1977	647,409	0	135,173	19,759	208,674	9,452	0	1,293	632,988	110,086
1978	842,491	0	170,235	27,813	257,876	13,599	0	4,434	736,845	128,946
1979	906,364	0	177,066	31,531	263,936	14,961	263,936	8,631	677,555	136,595
1980	1,031,967	7,135	202,567	38,935	316,396	17,149	506,234	14,912	806,285	180,953
1981	1,172,827	4,252	238,253	47,336	373,961	19,857	582,593	23,454	949,446	230,776
1982	1,244,175	12,412	264,250	61,672	416,426	21,114	632,571	45,898	990,520	238,279
1983	4,767,395	353,770	1,472,141	381,520	2,327,575	117,666	3,339,565	337,308	5,387,187	1,258,216
1984	5,573,592	424,629	1,665,529	428,846	2,640,677	132,109	3,802,577	459,512	5,954,600	1,343,602
1985	6,235,155	564,815	1,795,766	459,801	2,853,946	143,693	4,122,366	573,110	6,546,849	1,429,865
1986	6,613,814	670,915	1,920,094	489,249	3,057,812	155,852	4,365,291	703,027	6,809,203	1,446,755
1987	6,830,718	700,077	2,042,768	518,287	3,311,574	165,066	4,594,152	816,907	6,998,896	1,440,669
1988	7,237,192	866,555	2,201,633	556,485	3,624,614	178,055	4,903,890	946,185	7,564,343	1,511,241
1989	7,702,477	1,046,921	2,400,253	604,643	4,005,359	193,507	5,322,190	1,095,663	8,188,300	1,590,386
1990	8,035,837	1,104,080	2,532,129	635,773	4,176,372	204,908	5,568,495	1,229,448	8,598,848	1,618,107
1991	8,341,683	1,168,180	2,537,143	637,031	4,184,640	203,580	5,579,519	1,380,805	8,643,406	1,630,960
1992	8,842,756	1,222,174	2,547,532	639,640	4,201,775	206,948	5,602,366	1,556,615	8,816,291	1,685,923
1993	9,256,208	1,343,162	2,572,281	645,854	4,242,593	208,105	5,656,791	1,565,314	8,788,978	1,702,971
1994	9,688,233	1,388,980	2,573,477	646,155	4,244,566	209,521	5,659,419	1,575,968	8,785,771	1,724,615
1995	10,046,071	1,438,130	2,564,822	643,981	4,230,289	209,408	5,640,384	1,575,111	8,747,526	1,739,273
1996	10,794,461	1,613,359	2,621,464	658,202	4,323,712	215,191	5,764,949	1,618,605	9,184,283	1,849,389
1997	10,679,960	1,521,729	2,507,416	629,568	4,135,607	204,001	5,514,144	1,534,439	8,440,332	1,720,972
1998	11,338,291	1,583,265	2,532,237	635,800	4,176,545	207,849	5,568,726	1,563,398	8,579,551	1,771,101
1999	12,102,221	1,729,972	2,607,633	654,731	4,300,904	213,356	5,734,537	1,604,800	8,898,529	1,859,498
2000	12,498,307	1,802,591	2,595,989	651,807	4,281,697	212,125	5,708,930	1,595,550	8,847,282	1,871,209
2001	12,487,415	1,757,075	2,523,776	633,676	4,162,592	206,714	5,550,123	1,554,846	8,462,124	1,812,841
2002	12,781,843	1,956,587	2,596,555	651,948	4,282,628	211,589	5,710,170	1,591,517	8,821,278	1,913,857
2003	12,957,292	2,048,727	2,608,441	654,933	4,302,234	214,514	5,736,312	1,613,531	9,021,274	1,981,867
2004	12,922,180	2,092,239	2,599,962	652,805	4,288,250	213,909	5,717,667	1,608,970	8,766,951	1,949,920
2005	12,927,844	2,197,982	2,604,699	653,993	4,296,060	214,022	5,728,080	1,609,815	8,934,306	2,011,526
2006	12,867,551	2,252,690	2,592,673	650,975	4,276,227	213,011	5,701,636	1,602,217	8,712,598	1,987,083
2007	12,626,612	2,211,150	2,543,523	638,633	4,195,160	209,045	5,593,548	1,572,384	8,503,371	1,964,231
2008	12,899,970	2,383,255	2,598,171	652,356	4,285,295	213,553	5,713,728	1,606,285	8,764,416	2,050,155
2009	12,712,080	2,450,991	2,549,939	640,244	4,205,743	210,439	5,607,657	1,582,866	8,558,462	2,027,005
2010	12,832,564	2,562,030	2,588,982	650,048	4,270,140	212,364	5,693,519	1,597,337	8,709,773	2,088,309
2011	13,133,038	2,629,811	2,632,381	660,944	4,341,718	217,436	5,788,957	1,635,501	8,821,696	2,140,937
2012	12,796,534	2,518,574	2,559,674	642,688	4,221,799	211,842	5,629,066	1,593,417	8,485,156	2,084,074
2013	13,027,144	2,639,708	2,608,611	654,974	4,302,511	215,613	5,736,684	1,621,779	8,693,465	2,160,657
2014	13,027,054	2,621,623	2,611,384	655,672	4,307,088	215,634	5,742,784	1,621,943	8,678,503	2,182,315
2015	12,947,881	2,660,015	2,600,824	653,021	4,289,671	214,330	5,719,560	1,612,130	8,611,714	2,190,699
2016	13,054,128	2,642,073	2,621,796	658,286	4,324,260	216,098	5,765,679	1,625,429	8,704,089	2,248,133
2017	13,105,833	2,666,229	2,630,464	660,464	4,338,558	216,966	5,784,743	1,631,958	8,829,558	2,314,962
2018	13,056,314	2,638,957	2,622,520	658,467	4,325,455	216,122	5,767,272	1,625,619	8,699,118	2,314,679
2019	13,379,770	2,686,533	2,675,778	671,839	4,413,297	221,509	5,884,396	1,666,134	8,984,481	2,425,634
2020	13,136,340	2,644,457	2,632,907	661,077	4,342,587	217,470	5,790,115	1,635,751	8,979,821	2,520,653
2021	13,136,340	2,644,457	2,632,907	661,077	4,342,587	217,470	5,790,115	1,635,751	8,979,821	2,520,653
2022	13,136,340	2,644,457	2,632,907	661,077	4,342,587	217,470	5,790,115	1,635,751	8,979,821	2,520,653
2023	13,136,340	2,644,457	2,632,907	661,077	4,342,587	217,470	5,790,115	1,635,751	8,979,821	2,520,653
2024	13,136,340	2,644,457	2,632,907	661,077	4,342,587	217,470	5,790,115	1,635,751	8,979,821	2,520,653
2025	13,136,340	2,644,457	2,632,907	661,077	4,342,587	217,470	5,790,115	1,635,751	8,979,821	2,520,653
2026	13,136,340	2,644,457	2,632,907	661,077	4,342,587	217,470	5,790,115	1,635,751	8,979,821	2,520,653
2027	13,136,340	2,644,457	2,632,907	661,077	4,342,587	217,470	5,790,115	1,635,751	8,979,821	2,520,653
2028	13,136,340	2,644,457	2,632,907	661,077	4,342,587	217,470	5,790,115	1,635,751	8,979,821	2,520,653
2029	13,136,340	2,644,457	2,632,907	661,077	4,342,587	217,470	5,790,115	1,635,751	8,979,821	2,520,653
2030	13,136,340	2,644,457	2,632,907	661,077	4,342,587	217,470	5,790,115	1,635,751	8,979,821	2,520,653
2031	13,136,340	2,644,457	2,632,907	661,077	4,342,587	217,470	5,790,115	1,635,751	8,979,821	2,520,653
2032	13,136,340	2,644,457	2,632,907	661,077	4,342,587	217,470	5,790,115	1,635,751	8,979,821	2,520,653
2033	13,136,340	2,644,457	2,632,907	661,077	4,342,587	217,470	5,790,115	1,635,751	8,979,821	2,520,653
2034	13,136,340	2,644,457	2,632,907	661,077	4,342,587	217,470	5,790,115	1,635,751	8,979,821	2,520,653
2035	13,136,340	2,644,457	2,632,907	661,077	4,342,587	217,470	5,790,115	1,635,751	8,979,821	2,520,653
TOTAL	618,653,649	108,486,160	134,779,034	33,765,700	221,701,289	11,047,176	295,648,056	78,576,081	459,083,875	110,547,269

TABLE B-18: VARIABLE OMP&amp;R COMPONENT OF TRANSPORTATION CHARGE

FOR EACH CONTRACTOR<sup>(a)</sup>

(in dollars)

Sheet 4 of 4

Calendar Year	SOUTHERN CALIFORNIA AREA (continued)				FEATHER RIVER AREA				FUTURE CONTRACTOR	GRAND TOTAL
	San Geronio Pass Water Agency	The Metropolitan Water District of Southern California	Ventura County Flood Control District	Total	City of Yuba City	County of Butte	Plumas County FC & WCD	Total	South Bay	
	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
1962	0	0	0	0	0	0	0	0	0	36,964
1963	0	0	0	0	0	0	0	0	0	57,703
1964	0	0	0	0	0	0	0	0	0	74,094
1965	0	0	0	0	0	0	0	0	0	142,540
1966	0	0	0	0	0	0	0	0	0	192,522
1967	0	0	0	0	0	0	0	0	0	237,571
1968	0	0	0	0	0	0	0	0	0	1,090,144
1969	0	0	0	0	0	0	0	0	0	745,485
1970	0	0	0	0	0	0	0	0	0	1,099,406
1971	0	0	0	0	0	0	0	0	0	1,497,153
1972	0	746,837	0	774,625	0	0	0	0	0	3,115,026
1973	0	1,084,865	0	1,596,776	0	0	0	0	0	3,077,829
1974	0	1,966,177	0	2,417,075	0	0	0	0	0	3,969,279
1975	0	3,926,242	0	4,491,995	0	0	0	0	0	6,043,611
1976	0	3,891,272	0	5,165,792	0	0	0	0	0	6,811,858
1977	0	6,488,869	0	8,253,703	0	0	0	0	0	10,313,847
1978	0	7,672,058	0	9,854,297	0	0	0	0	0	12,159,381
1979	0	6,464,143	0	8,944,718	0	0	0	0	0	11,752,787
1980	83,705	7,328,790	1,189	10,536,217	0	0	0	0	0	13,352,173
1981	108,111	7,839,003	1,063	11,580,302	0	0	0	0	0	15,096,595
1982	121,909	8,157,442	3,724	12,210,392	0	0	0	0	0	15,393,013
1983	708,649	51,523,122	139,761	72,113,875	0	0	0	0	0	91,648,064
1984	824,483	56,158,712	174,571	79,583,439	0	0	0	0	0	99,722,128
1985	947,886	63,159,259	238,655	89,071,166	0	0	0	0	0	112,392,251
1986	1,033,396	65,193,629	337,566	92,796,603	0	0	0	0	0	117,709,867
1987	1,100,950	63,638,728	397,771	92,556,563	0	0	0	0	0	120,695,350
1988	1,228,189	68,539,964	583,690	99,942,036	0	0	0	0	0	128,529,141
1989	1,367,530	80,756,066	797,655	115,070,950	0	0	0	0	0	143,611,230
1990	1,465,618	81,482,387	972,758	117,624,760	0	0	0	0	0	149,355,421
1991	1,457,416	84,801,448	996,742	121,562,553	0	0	0	0	0	153,635,494
1992	1,486,567	89,155,534	1,010,898	126,975,019	0	0	0	0	0	159,519,187
1993	1,481,963	94,731,877	1,077,978	133,274,075	0	0	0	0	0	165,907,193
1994	1,481,421	97,895,232	1,082,602	136,955,960	0	0	0	0	0	168,913,126
1995	1,474,973	101,013,789	1,089,494	140,413,251	0	0	0	0	0	174,098,584
1996	1,548,617	110,130,452	1,188,914	151,511,598	0	0	0	0	0	183,655,727
1997	1,423,176	102,371,890	1,091,630	141,774,864	0	0	0	0	0	175,523,060
1998	1,446,650	105,425,721	1,106,404	145,935,538	0	0	0	0	0	179,312,821
1999	1,500,433	112,675,930	1,178,455	155,060,999	0	0	0	0	0	188,221,222
2000	1,491,795	115,095,121	1,197,733	157,850,136	0	0	0	0	0	191,661,484
2001	1,426,849	109,773,571	1,123,450	151,475,052	0	0	0	0	0	185,711,990
2002	1,487,408	117,675,245	1,205,539	160,886,164	0	0	0	0	0	194,850,507
2003	1,521,130	120,745,355	1,218,030	164,623,640	0	0	0	0	0	198,989,505
2004	1,478,249	119,397,744	1,201,745	162,890,591	0	0	0	0	0	197,092,395
2005	1,506,467	122,736,680	1,221,104	166,642,578	0	0	0	0	0	200,760,751
2006	1,469,083	121,927,573	1,214,389	165,467,706	0	0	0	0	0	199,991,528
2007	1,433,805	118,100,787	1,157,671	160,749,920	0	0	0	0	0	195,192,311
2008	1,477,821	123,947,683	1,212,853	167,805,541	0	0	0	0	0	202,692,045
2009	1,443,093	123,778,345	1,213,363	166,980,227	0	0	0	0	0	200,774,244
2010	1,468,606	126,902,163	1,234,712	170,810,547	0	0	0	0	0	205,743,856
2011	1,487,480	132,309,345	1,267,379	177,066,623	0	0	0	0	0	212,176,262
2012	1,430,734	127,854,451	1,213,770	171,241,779	0	0	0	0	0	205,950,152
2013	1,465,855	133,908,601	1,272,148	178,307,750	0	0	0	0	0	213,892,761
2014	1,463,334	134,214,749	1,263,433	178,605,516	0	0	0	0	0	213,938,096
2015	1,452,074	136,124,713	1,281,935	180,358,567	0	0	0	0	0	215,287,037
2016	1,467,648	136,022,677	1,273,290	180,623,586	0	0	0	0	0	215,392,770
2017	1,488,805	137,515,108	1,284,929	182,468,577	0	0	0	0	0	217,340,229
2018	1,466,809	135,890,916	1,271,787	180,554,035	0	0	0	0	0	215,366,227
2019	1,514,927	139,037,934	1,294,716	184,856,948	0	0	0	0	0	220,750,542
2020	1,514,142	137,598,268	1,274,436	182,948,024	0	0	0	0	0	218,469,624
2021	1,514,142	137,598,268	1,274,436	182,948,024	0	0	0	0	0	218,469,624
2022	1,514,142	137,598,268	1,274,436	182,948,024	0	0	0	0	0	218,469,624
2023	1,514,142	137,598,268	1,274,436	182,948,024	0	0	0	0	0	218,469,624
2024	1,514,142	137,598,268	1,274,436	182,948,024	0	0	0	0	0	218,469,624
2025	1,514,142	137,598,268	1,274,436	182,948,024	0	0	0	0	0	218,469,624
2026	1,514,142	137,598,268	1,274,436	182,948,024	0	0	0	0	0	218,469,624
2027	1,514,142	137,598,268	1,274,436	182,948,024	0	0	0	0	0	218,469,624
2028	1,514,142	137,598,268	1,274,436	182,948,024	0	0	0	0	0	218,469,624
2029	1,514,142	137,598,268	1,274,436	182,948,024	0	0	0	0	0	218,469,624
2030	1,514,142	137,598,268	1,274,436	182,948,024	0	0	0	0	0	218,469,624
2031	1,514,142	137,598,268	1,274,436	182,948,024	0	0	0	0	0	218,469,624
2032	1,514,142	137,598,268	1,274,436	182,948,024	0	0	0	0	0	218,469,624
2033	1,514,142	137,598,268	1,274,436	182,948,024	0	0	0	0	0	218,469,624
2034	1,514,142	137,598,268	1,274,436	182,948,024	0	0	0	0	0	218,469,624
2035	1,514,142	137,598,268	1,274,436	182,948,024	0	0	0	0	0	218,469,624
TOTAL	75,959,886	6,218,750,487	58,484,346	8,425,483,008	0	0	0	0	0	10,217,777,523



TABLE B-19: TOTAL TRANSPORTATION CHARGE FOR EACH CONTRACTOR<sup>(a)</sup>

in dollars

Sheet 1 of 4

Calendar Year	NORTH BAY AREA			SOUTH BAY AREA				CENTRAL COASTAL AREA		
	Napa County FC & WCD	San Joaquin County FC & WCD	Total	Alameda County FC & WCD, Zone 7	Alameda County Water District	Santa Clara Valley Water District	Total	San Luis Obispo County FC & WCD	Santa Barbara County FC & WCD	Total
	1	2	3	4	5	6	7	8	9	10
1962	0	0	0	11,751	43,784	0	55,535	0	0	0
1963	0	0	0	148,333	184,566	439,278	772,177	0	0	0
1964	0	0	0	166,424	260,086	609,075	1,035,585	8,174	20,306	28,480
1965	0	0	0	240,259	359,842	1,136,956	1,737,057	13,780	33,561	47,341
1966	18,559	0	18,559	265,982	369,847	1,388,415	2,024,244	22,828	54,897	77,725
1967	41,855	0	41,855	340,495	447,936	1,656,919	2,445,350	40,844	97,128	137,972
1968	127,204	0	127,204	380,612	541,741	1,940,679	2,863,032	66,233	156,586	222,819
1969	247,853	0	247,853	429,860	473,839	2,023,654	2,927,353	120,736	283,960	404,696
1970	269,463	0	269,463	445,005	466,416	2,151,501	3,062,922	133,759	314,452	448,211
1971	214,178	0	214,178	406,130	485,794	2,119,542	3,011,466	134,818	317,010	451,828
1972	218,240	0	218,240	495,392	611,600	2,269,402	3,376,394	140,975	331,498	472,473
1973	215,548	26,540	242,088	459,383	482,066	2,284,661	3,226,310	138,180	325,024	463,204
1974	233,863	27,908	261,771	482,713	497,476	2,455,246	3,435,435	139,750	328,747	468,497
1975	233,821	30,703	264,524	544,987	549,925	2,419,958	3,514,870	153,707	361,369	515,076
1976	240,643	34,746	275,389	588,295	629,276	2,317,830	3,535,401	256,049	600,443	856,492
1977	261,137	52,335	313,472	628,882	670,543	2,439,654	3,739,079	259,165	608,076	867,241
1978	295,326	84,652	379,978	651,708	693,399	2,503,148	3,848,255	290,621	691,697	982,318
1979	331,006	121,077	452,083	655,666	694,411	2,488,934	3,839,019	336,673	814,549	1,151,222
1980	388,021	146,418	534,439	668,930	706,461	2,511,598	3,886,989	491,943	1,208,721	1,700,664
1981	520,141	299,291	819,432	701,545	743,023	2,607,590	4,052,158	984,972	2,577,637	3,562,609
1982	810,621	615,401	1,426,022	708,049	750,328	2,602,201	4,060,578	1,572,888	4,094,413	5,667,301
1983	1,011,898	703,925	1,715,823	1,474,508	1,618,763	5,257,038	8,350,309	1,919,440	5,069,529	6,988,969
1984	1,110,455	706,466	1,816,921	1,491,255	1,640,503	5,191,429	8,323,187	2,113,806	5,537,751	7,651,557
1985	1,139,374	731,826	1,871,200	1,556,061	1,716,457	5,284,875	8,557,393	2,080,769	5,967,542	8,048,311
1986	1,114,205	732,440	1,846,645	1,546,828	1,711,622	5,139,933	8,398,383	2,092,132	6,244,620	8,336,752
1987	1,100,236	737,409	1,837,645	1,585,308	1,757,699	5,149,521	8,492,528	2,156,424	6,725,346	8,881,770
1988	1,115,193	785,173	1,900,366	1,585,283	1,759,574	5,045,613	8,390,470	2,226,198	7,343,984	9,570,182
1989	1,121,051	807,315	1,928,366	1,579,804	1,755,000	4,998,901	8,333,705	2,212,788	7,754,227	9,967,015
1990	1,137,490	870,876	2,008,366	1,617,240	1,799,717	5,077,582	8,494,539	2,297,165	8,693,012	10,990,177
1991	1,144,481	871,885	2,016,366	1,638,413	1,843,174	5,128,419	8,610,006	2,366,615	8,764,264	11,130,879
1992	1,136,700	862,414	1,999,114	1,639,439	1,862,757	5,122,266	8,624,462	2,418,632	8,638,992	11,057,624
1993	1,146,619	866,495	2,013,114	1,655,119	1,899,015	5,157,975	8,712,109	2,489,548	8,627,559	11,117,107
1994	1,145,295	861,819	2,007,114	1,649,323	1,880,798	5,132,889	8,663,010	2,536,955	8,510,677	11,047,632
1995	1,146,258	859,856	2,006,114	1,694,928	1,904,914	5,190,323	8,790,165	2,706,088	8,928,894	11,634,982
1996	1,147,506	856,904	2,004,410	1,663,079	1,839,641	5,034,995	8,537,715	2,758,353	8,828,868	11,587,221
1997	1,148,272	853,138	2,001,410	1,727,988	1,885,158	5,143,381	8,756,527	2,832,332	8,821,641	11,653,973
1998	1,222,048	847,362	2,069,410	1,722,527	1,851,937	5,064,263	8,638,727	2,858,482	8,649,896	11,508,378
1999	1,244,467	855,943	2,100,410	1,779,360	1,886,660	5,146,956	8,812,976	2,965,926	8,763,130	11,729,056
2000	1,252,508	857,089	2,109,597	1,816,702	1,899,475	5,177,918	8,894,095	3,049,020	8,788,712	11,837,732
2001	1,237,127	847,470	2,084,597	1,810,137	1,866,781	5,100,063	8,776,981	3,084,231	8,611,547	11,695,778
2002	1,255,758	854,839	2,110,597	1,835,638	1,867,645	5,102,125	8,805,408	3,209,544	8,702,336	11,911,880
2003	1,250,012	849,585	2,099,597	1,882,856	1,890,024	5,155,414	8,928,294	3,274,852	8,627,876	11,902,728
2004	1,251,088	848,509	2,099,597	1,898,325	1,880,717	5,133,251	8,912,293	3,318,998	8,509,002	11,828,000
2005	1,256,146	849,451	2,105,597	1,948,762	1,905,109	5,191,336	9,045,207	3,414,646	8,521,555	11,936,201
2006	1,260,860	848,737	2,109,597	1,973,144	1,916,193	5,217,733	9,107,070	3,414,691	8,521,658	11,936,349
2007	1,252,696	841,901	2,094,597	1,970,321	1,901,571	5,182,902	9,054,794	3,371,122	8,419,945	11,791,067
2008	1,267,601	846,996	2,114,597	2,003,721	1,920,869	5,228,865	9,153,455	3,412,187	8,515,812	11,927,999
2009	1,250,760	836,837	2,087,597	1,962,296	1,870,879	5,109,815	8,942,990	3,340,514	8,348,483	11,688,997
2010	1,303,400	899,197	2,202,597	2,056,618	1,945,774	5,288,174	9,290,566	3,426,214	8,548,561	11,974,775
2011	1,299,077	893,520	2,192,597	2,018,579	1,911,021	5,205,405	9,135,005	3,392,070	8,468,849	11,860,919
2012	1,285,432	883,165	2,168,597	1,990,503	1,885,368	5,144,320	9,020,191	3,340,638	8,348,770	11,689,408
2013	1,303,045	889,552	2,192,597	1,917,812	1,818,053	4,865,705	8,601,570	3,384,978	8,452,291	11,837,269
2014	1,310,083	889,514	2,199,597	1,879,093	1,760,614	4,695,255	8,334,962	3,384,414	8,449,750	11,834,164
2015	1,397,426	888,171	2,285,597	1,835,238	1,692,595	4,320,162	7,847,995	3,374,061	8,425,409	11,799,470
2016	1,390,599	889,439	2,280,038	1,812,443	1,665,528	4,141,315	7,619,286	3,371,778	8,419,863	11,791,641
2017	1,373,380	889,362	2,262,742	1,782,690	1,638,178	4,031,114	7,451,982	3,361,527	8,395,767	11,757,294
2018	1,298,926	887,456	2,186,382	1,740,431	1,598,285	3,908,083	7,246,799	3,340,147	8,345,660	11,685,807
2019	1,257,254	884,280	2,141,534	1,716,449	1,576,557	3,837,697	7,130,703	3,334,809	8,333,081	11,667,890
2020	1,286,039	879,499	2,165,538	1,701,125	1,562,115	3,795,847	7,059,087	3,344,055	8,354,570	11,698,625
2021	1,283,562	879,499	2,163,061	1,698,162	1,559,261	3,789,028	7,046,451	3,342,809	8,351,576	11,694,385
2022	1,282,180	879,499	2,161,679	1,697,575	1,558,560	3,784,886	7,041,021	3,341,862	8,349,249	11,691,111
2023	1,281,164	852,958	2,134,122	1,696,983	1,557,996	3,781,777	7,036,756	3,341,399	8,348,117	11,689,516
2024	1,278,284	851,591	2,129,875	1,696,498	1,557,508	3,779,923	7,033,929	3,341,049	8,347,241	11,688,290
2025	1,269,726	848,795	2,118,521	1,695,743	1,556,649	3,776,346	7,028,738	3,340,650	8,346,276	11,686,926
2026	1,264,599	844,752	2,109,351	1,694,925	1,555,887	3,774,320	7,025,132	3,237,803	8,106,021	11,343,824
2027	1,250,679	827,164	2,077,843	1,694,016	1,554,941	3,771,398	7,020,355	3,235,933	8,101,296	11,337,229
2028	1,223,187	794,847	2,018,034	1,693,516	1,554,459	3,770,088	7,018,063	3,209,692	8,029,845	11,239,537
2029	1,185,368	758,422	1,943,790	1,692,660	1,553,676	3,768,223	7,014,559	3,163,462	7,906,582	11,070,044
2030	1,152,144	733,081	1,885,225	1,691,228	1,552,367	3,765,103	7,008,698	3,008,196	7,512,415	10,520,611
2031	1,031,932	587,646	1,619,578	1,689,226	1,550,537	3,760,742	7,000,505	2,516,132	6,145,751	8,661,883
2032	797,246	356,669	1,153,915	1,688,063	1,549,473	3,758,207	6,995,743	2,056,805	4,861,326	6,918,131
2033	735,465	307,628	1,043,093	1,687,377	1,548,846	3,756,714	6,992,937	1,963,486	4,598,732	6,562,218
2034	734,276	305,981	1,040,257	1,687,351	1,548,822	3,756,656	6,992,829	1,949,042	4,554,173	6,503,215
2035	734,276	305,981	1,040,257	1,687,351	1,548,822	3,756,655	6,992,828	1,941,265	4,533,456	6,474,721
TOTAL	67,542,332	43,639,399	111,181,731	101,970,421	102,556,911	285,015,365	489,542,697	159,271,829	429,291,559	588,563,388

a) Unadjusted for prior overpayments or underpayments of charges.

TABLE B-19: TOTAL TRANSPORTATION

(in dollars)

Sheet 2 of 4

Calendar Year	SAN JOAQUIN VALLEY AREA									
	Devil's Den Water District	Dudley Ridge Water District	Empire West Side Irrigation District	Hacienda Water District	Kern County Water Agency		County of Kings	Oak Flat Water District	Tulare Lake Basin Water Storage District	Total
					Municipal and Industrial	Agricultural				
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1962	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	63,676	0	0	0	0	63,676
1966	0	0	0	0	119,220	0	0	0	0	119,220
1967	0	1-	0	0	231,625	17-	0	0	2-	231,605
1968	69,839	170,096	10,082	5,386	392,305	1,459,718	12,615	10,375	187,149	2,317,565
1969	116,645	164,796	11,873	23,188	467,385	2,245,689	11,295	9,283	288,383	3,338,537
1970	140,260	188,521	18,595	35,486	513,951	2,753,346	11,418	12,032	224,511	3,898,120
1971	144,313	183,365	19,570	26,779	544,718	3,600,432	16,350	13,274	385,795	4,934,596
1972	166,279	203,648	20,341	28,435	569,603	4,651,771	13,777	18,571	941,797	6,614,222
1973	156,018	184,861	16,411	25,813	577,451	4,569,106	14,001	10,418	339,672	5,893,751
1974	165,464	256,252	16,413	28,628	635,032	4,848,035	14,106	11,370	499,282	6,474,582
1975	182,361	313,907	17,089	33,546	650,454	5,842,946	14,950	12,459	603,859	7,671,571
1976	199,404	240,901	17,098	34,804	679,232	6,126,670	15,093	12,675	422,037	7,747,914
1977	216,340	262,847	18,023	37,969	727,944	6,613,885	15,811	14,159	462,303	8,369,281
1978	223,671	273,835	17,762	40,281	737,864	7,204,784	16,037	13,693	481,787	9,009,714
1979	225,022	308,522	19,631	45,282	767,339	7,980,792	17,521	16,767	544,116	9,924,992
1980	224,401	309,175	18,508	45,462	763,594	8,351,052	17,273	15,412	544,920	10,289,797
1981	232,413	340,815	19,843	50,762	800,509	9,256,403	18,696	17,973	602,036	11,339,450
1982	226,498	329,663	17,908	49,118	785,793	9,371,885	17,667	15,485	580,224	11,394,241
1983	450,219	711,132	43,568	104,504	1,551,871	19,082,242	42,265	42,457	1,277,493	23,305,751
1984	438,391	693,821	40,291	101,829	1,566,477	19,458,403	42,044	38,793	1,243,402	23,623,451
1985	461,188	797,375	45,036	118,331	1,714,563	21,931,444	50,431	45,931	1,432,041	26,596,340
1986	457,858	869,444	47,476	128,826	1,826,828	23,499,793	56,929	52,710	1,565,013	28,504,877
1987	469,015	982,380	52,099	145,280	1,985,140	26,018,965	66,472	62,054	1,771,286	31,552,691
1988	459,825	966,781	49,163	142,967	2,015,467	26,235,146	62,569	57,564	1,742,814	31,732,296
1989	446,046	946,950	46,221	141,636	2,044,003	26,133,356	58,656	52,566	1,706,504	31,575,938
1990	466,295	1,018,249	48,221	152,066	2,188,424	27,958,820	61,317	56,232	1,907,211	33,856,835
1991	467,673	1,022,113	48,422	152,636	2,190,110	28,024,169	61,586	56,036	1,914,573	33,937,318
1992	467,735	1,046,714	49,702	156,261	2,221,869	28,446,834	63,289	59,438	1,961,452	34,473,294
1993	468,641	1,041,164	49,412	155,443	2,221,653	28,394,037	62,903	57,909	1,950,879	34,402,041
1994	461,941	1,023,625	48,502	152,860	2,186,479	27,925,020	61,695	56,606	1,917,460	33,834,188
1995	469,995	1,064,260	50,612	158,845	2,246,209	28,769,777	64,501	60,947	1,994,889	34,880,035
1996	455,723	1,006,227	47,598	150,296	2,202,403	27,756,587	60,489	54,709	1,884,299	33,618,331
1997	473,691	1,072,282	51,030	160,027	2,234,286	28,834,955	65,054	61,692	2,010,166	34,963,183
1998	468,117	1,061,774	50,482	158,479	2,236,907	28,675,262	64,330	61,323	1,990,143	34,766,817
1999	465,732	1,025,955	48,622	153,203	2,220,998	28,174,491	61,853	56,695	1,921,894	34,129,443
2000	470,511	1,044,142	49,566	155,881	2,245,531	28,575,731	63,099	57,814	1,956,518	34,618,793
2001	473,741	1,087,154	51,801	162,217	2,259,396	29,120,215	66,075	63,079	2,038,474	35,322,152
2002	471,106	1,056,678	50,217	157,728	2,247,559	28,696,523	63,967	59,290	1,980,410	34,973,478
2003	471,414	1,071,955	51,010	159,978	2,259,546	28,928,588	65,023	61,376	2,009,516	35,078,406
2004	469,199	1,067,945	50,802	159,387	2,263,069	28,858,331	64,746	61,148	2,001,873	34,996,500
2005	466,270	1,053,812	50,067	157,307	2,246,994	28,595,225	63,769	59,725	1,974,944	34,668,113
2006	469,901	1,069,083	50,860	159,555	2,261,638	28,873,311	64,823	61,172	2,004,041	35,014,384
2007	468,641	1,080,408	51,450	161,224	2,255,957	28,962,613	65,608	63,065	2,025,624	35,134,590
2008	473,007	1,083,620	51,615	161,697	2,275,725	29,133,375	65,830	62,391	2,031,742	35,339,002
2009	463,065	1,065,687	50,685	159,054	2,230,048	28,602,395	64,593	61,786	1,997,571	34,694,884
2010	471,639	1,072,200	51,023	160,014	2,266,525	28,957,959	65,040	61,016	2,009,978	35,115,394
2011	474,198	1,092,536	52,078	163,011	2,287,856	29,317,281	66,446	63,314	2,048,726	35,565,446
2012	469,444	1,094,419	52,178	163,287	2,277,345	29,223,735	66,579	64,425	2,052,318	35,463,730
2013	477,393	1,113,811	53,185	166,146	2,314,052	29,690,797	67,917	65,565	2,089,263	36,038,129
2014	475,364	1,101,057	52,523	164,265	2,302,590	29,475,845	67,034	64,249	2,064,964	35,767,891
2015	471,479	1,082,738	51,569	161,566	2,213,852	29,110,831	65,771	62,708	2,030,060	35,250,574
2016	470,656	1,072,748	51,050	160,095	2,154,030	28,970,824	65,078	61,251	2,011,021	35,016,753
2017	471,542	1,075,651	51,203	160,523	2,045,044	29,030,766	65,279	61,275	2,016,554	34,977,837
2018	470,557	1,072,301	51,027	160,029	1,944,889	29,004,238	56,641	61,261	2,010,174	34,831,117
2019	478,260	1,109,739	52,972	165,545	1,956,478	29,854,060	58,728	64,170	2,081,501	35,821,453
2020	475,722	1,094,752	52,195	163,336	1,892,777	29,505,911	57,448	62,998	2,052,951	35,358,090
2021	475,722	1,094,752	52,195	163,336	1,871,464	29,505,911	57,309	62,998	2,052,951	35,336,638
2022	475,722	1,094,752	52,195	163,336	1,861,583	29,505,911	57,242	62,998	2,052,951	35,326,690
2023	475,722	1,094,752	52,195	163,336	1,857,320	29,505,911	57,213	62,998	2,052,951	35,322,398
2024	475,722	1,094,752	52,195	163,336	1,855,381	29,505,911	57,199	62,998	2,052,951	35,320,445
2025	475,722	1,094,752	52,195	163,336	1,853,174	29,505,911	57,179	62,998	2,052,951	35,318,218
2026	475,722	1,094,752	52,195	163,336	1,851,395	29,505,911	57,147	62,998	2,052,951	35,316,407
2027	475,722	1,094,752	52,195	163,336	1,848,610	29,505,911	57,104	62,998	2,052,951	35,313,579
2028	475,722	1,094,752	52,195	163,336	1,846,887	29,505,911	57,062	62,998	2,052,951	35,311,814
2029	475,722	1,094,752	52,195	163,336	1,844,199	29,505,911	56,979	62,998	2,052,951	35,309,043
2030	475,722	1,094,752	52,195	163,336	1,839,942	29,505,911	56,842	62,998	2,052,951	35,304,649
2031	475,722	1,094,752	52,195	163,336	1,833,684	29,505,911	56,651	62,998	2,052,951	35,298,200
2032	475,722	1,094,752	52,195	163,336	1,828,728	29,505,911	56,517	62,998	2,052,951	35,293,110
2033	475,722	1,094,752	52,195	163,336	1,823,740	29,505,911	56,383	62,998	2,052,951	35,287,988
2034	475,722	1,094,752	52,195	163,336	1,818,037	29,505,911	56,221	62,998	2,052,951	35,282,123
2035	475,722	1,094,752	52,195	163,336	1,807,496	29,505,911	55,885	62,998	2,052,951	35,271,246
TOTAL	27,575,952	59,165,165	2,937,605	8,776,313	118,723,923	1,583,273,017	3,435,420	3,385,656	110,581,876	1,917,854,927

## CHARGE FOR EACH CONTRACTOR (a)

(in dollars)

Sheet 3 of 4

Calendar Year	SOUTHERN CALIFORNIA AREA									
	Antelope Valley East Kern Water Agency	Castaic Lake Water Agency	Coachella Valley County Water District	Crestline Lake Arrowhead Water Agency	Desert Water Agency	Littlerock Creek Irrigation District	Mojave Water Agency	Palmdale Water District	San Bernardino Valley Municipal Water District	San Gabriel Valley Municipal Water District
	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)
1962	0	0	0	0	0	0	0	0	0	0
1963	33,321	0	0	0	0	0	0	0	51,594	0
1964	62,440	19,870	14,165	4,285	36,701	1,131	27,936	8,124	81,329	34,561
1965	118,063	37,912	24,816	7,105	40,332	2,068	49,779	15,128	133,526	34,954
1966	214,819	71,840	44,385	12,374	72,605	3,733	89,719	27,534	230,698	61,000
1967	415,991	148,049	85,691	23,349	140,727	7,256	174,317	53,819	431,229	115,016
1968	730,113	310,319	151,333	41,142	248,981	12,763	307,928	94,680	776,011	207,277
1969	1,048,715	467,305	223,145	60,596	367,417	18,518	453,806	136,745	1,190,613	317,751
1970	1,365,068	595,681	312,850	89,024	515,359	25,031	627,147	183,321	1,758,858	462,430
1971	1,691,978	749,578	429,787	127,584	708,219	31,623	850,285	229,664	2,513,415	652,814
1972	2,003,152	928,778	556,644	173,689	917,429	41,652	1,099,034	272,163	3,333,844	854,841
1973	2,091,506	967,015	685,989	182,015	1,121,373	42,848	1,166,545	284,413	3,885,498	936,307
1974	2,155,373	1,016,418	704,574	191,682	1,152,961	44,665	1,198,445	289,436	3,945,813	979,671
1975	2,327,911	1,072,899	746,733	204,374	1,222,600	47,945	1,262,191	301,364	4,102,436	1,074,635
1976	2,705,595	1,110,511	770,142	213,394	1,262,232	50,572	1,312,310	314,656	4,701,929	1,172,087
1977	2,973,342	1,105,717	812,083	221,737	1,324,455	53,151	1,337,391	317,606	4,847,766	1,198,090
1978	3,197,756	1,135,097	857,731	234,354	1,391,113	57,821	1,355,205	324,221	5,033,387	1,235,937
1979	3,279,777	1,172,299	869,561	241,388	1,405,414	59,478	1,625,101	330,659	5,032,507	1,255,979
1980	3,431,583	1,225,129	896,987	246,135	1,461,045	62,110	1,878,101	340,266	5,113,883	1,292,939
1981	3,619,448	1,252,343	943,397	258,864	1,536,305	65,619	1,973,214	354,769	5,334,195	1,361,056
1982	3,737,203	1,291,506	976,160	273,707	1,589,926	67,583	2,039,753	382,521	5,385,079	1,373,380
1983	7,411,212	1,678,524	2,249,025	615,325	3,608,244	167,328	4,869,740	605,860	10,171,947	2,490,894
1984	8,286,400	1,766,748	2,456,844	675,278	3,945,138	182,161	5,343,391	820,922	10,962,465	2,621,557
1985	9,371,447	1,908,403	2,577,073	689,216	4,141,898	194,191	5,673,465	937,853	11,252,366	2,650,615
1986	10,280,501	2,009,180	2,719,697	738,266	4,375,948	206,627	5,922,275	1,069,767	11,862,965	2,736,445
1987	10,499,025	2,060,647	2,829,092	751,061	4,607,793	215,863	6,151,185	1,183,813	11,763,685	2,673,972
1988	10,904,573	2,219,973	2,995,970	798,544	4,934,059	228,858	6,461,998	1,313,111	12,494,068	2,776,902
1989	11,370,424	2,410,365	3,180,770	828,492	5,291,997	244,356	6,883,119	1,462,827	12,794,514	2,793,428
1990	11,706,388	2,432,981	3,339,251	891,553	5,506,903	255,806	7,130,634	1,596,990	13,772,549	2,932,070
1991	12,012,066	2,525,687	3,321,910	865,549	5,478,291	254,470	7,141,573	1,748,280	13,332,595	2,850,382
1992	12,513,832	2,602,579	3,343,478	881,470	5,513,871	257,870	7,165,151	1,924,286	13,741,734	2,951,538
1993	12,928,018	2,681,264	3,356,931	873,372	5,536,051	259,045	7,220,677	1,933,112	13,460,155	2,919,184
1994	13,359,310	2,728,623	3,370,406	888,707	5,558,284	260,457	7,223,216	1,943,719	13,724,052	2,992,910
1995	13,718,772	2,781,559	3,366,639	892,329	5,552,071	260,372	7,204,568	1,943,064	13,768,815	3,027,733
1996	14,468,056	2,951,713	3,416,147	896,585	5,633,718	266,205	7,331,793	1,986,844	14,048,613	3,103,796
1997	14,350,921	2,894,696	3,302,714	871,278	5,446,637	254,902	7,075,509	1,902,002	13,363,695	2,985,944
1998	15,009,870	2,945,662	3,319,694	867,325	5,474,644	258,783	7,131,389	1,931,161	13,321,757	3,000,943
1999	15,776,027	3,074,028	3,399,893	890,376	5,606,915	264,359	7,300,902	1,973,009	13,714,247	3,104,338
2000	16,176,097	3,192,705	3,395,258	895,274	5,599,277	263,192	7,276,896	1,964,211	13,802,784	3,143,647
2001	16,163,197	3,104,332	3,322,423	878,010	5,479,144	257,713	7,114,619	1,923,086	13,432,928	3,087,659
2002	16,459,560	3,300,653	3,379,169	875,112	5,572,730	262,651	7,278,041	1,960,151	13,415,997	3,115,891
2003	16,636,132	3,411,189	3,404,367	893,871	5,614,295	265,612	7,305,228	1,982,397	13,896,126	3,238,722
2004	16,600,599	3,445,111	3,395,022	890,898	5,598,884	264,998	7,286,126	1,977,767	13,626,841	3,203,778
2005	16,605,949	3,560,833	3,399,814	892,144	5,606,782	265,104	7,296,550	1,978,577	13,795,241	3,265,589
2006	16,545,912	3,630,354	3,394,581	897,585	5,598,153	264,094	7,269,764	1,970,977	13,723,862	3,270,418
2007	16,302,864	3,575,255	3,324,198	872,780	5,498,556	260,069	7,158,989	1,940,758	13,293,033	3,203,859
2008	16,579,072	3,730,136	3,397,288	895,327	5,602,616	264,648	7,282,347	1,975,155	13,710,985	3,320,951
2009	16,387,692	3,830,283	3,337,356	870,381	5,503,767	261,459	7,173,174	1,951,200	13,276,833	3,252,739
2010	16,510,995	3,908,589	3,388,527	893,826	5,588,171	263,441	7,261,534	1,966,084	13,670,661	3,361,796
2011	16,813,792	3,991,132	3,427,313	897,859	5,652,144	268,583	7,359,605	2,004,701	13,660,589	3,391,075
2012	16,474,028	3,864,868	3,354,555	881,402	5,532,137	262,900	7,195,729	1,962,029	13,355,951	3,339,740
2013	16,674,372	3,994,769	3,405,040	894,175	5,602,065	266,742	7,306,346	1,990,892	13,521,433	3,405,494
2014	16,644,793	3,951,419	3,393,692	890,673	5,597,284	265,629	7,284,446	1,982,888	13,478,246	3,419,591
2015	16,508,852	4,007,781	3,371,584	884,492	5,560,823	263,361	7,238,555	1,965,888	13,346,658	3,411,330
2016	16,518,956	3,926,521	3,372,597	883,544	5,562,494	263,485	7,245,733	1,966,913	13,325,030	3,439,608
2017	16,370,067	3,887,527	3,341,438	876,288	5,511,113	260,844	7,180,757	1,947,258	13,277,446	3,457,875
2018	16,068,835	3,721,929	3,279,210	859,659	5,408,481	255,533	7,052,737	1,907,862	12,858,035	3,380,191
2019	16,098,228	3,470,935	3,251,072	836,598	5,362,066	255,609	7,035,278	1,909,566	12,427,013	3,323,736
2020	15,556,616	3,444,571	3,135,775	816,121	5,171,927	245,337	6,772,816	1,834,760	12,186,605	3,339,829
2021	15,297,292	3,311,159	3,031,056	780,650	4,999,219	239,876	6,575,005	1,796,908	11,486,689	3,164,455
2022	15,163,458	3,221,302	2,975,710	763,205	4,907,941	237,371	6,467,114	1,778,912	11,069,933	3,062,755
2023	15,113,290	3,205,127	2,958,170	758,361	4,879,014	236,393	6,431,722	1,772,028	10,929,186	3,026,138
2024	15,095,123	3,164,969	2,950,056	754,138	4,865,631	236,071	6,419,575	1,769,666	10,838,809	3,005,437
2025	15,071,607	3,152,609	2,937,112	750,457	4,844,284	235,654	6,393,682	1,766,613	10,757,928	2,984,172
2026	15,058,993	3,142,884	2,927,311	747,775	4,828,120	235,411	6,373,853	1,764,939	10,679,945	2,963,425
2027	15,046,186	3,131,209	2,918,672	745,498	4,813,873	235,160	6,356,182	1,763,091	10,623,720	2,948,325
2028	15,036,607	3,111,836	2,914,605	744,446	4,807,167	234,991	6,347,823	1,761,842	10,603,392	2,942,809
2029	15,016,572	3,071,259	2,910,828	743,483	4,800,937	234,655	6,340,022	1,759,326	10,586,161	2,938,095
2030	14,990,907	3,024,837	2,906,092	742,279	4,793,126	234,226	6,330,223	1,756,105	10,564,758	2,932,222
2031	14,953,620	2,993,566	2,899,325	740,568	4,781,967	233,602	6,316,220	1,751,421	10,534,466	2,923,907
2032	14,908,677	2,980,543	2,891,929	738,697	4,769,770	232,919	6,300,926	1,746,298	10,501,358	2,914,821
2033	14,863,485	2,971,899	2,885,893	737,169	4,759,815	232,363	6,288,445	1,742,119	10,474,331	2,907,405
2034	14,789,891	2,964,409	2,881,252	735,994	4,752,160	231,934	6,278,844	1,738,904	10,453,542	2,901,700
2035	14,371,306	2,958,056	2,877,450	735,032	4,745,890	231,582	6,270,957	1,736,263	10,436,506	2,897,020
TOTAL	810,643,618	179,743,454	176,997,457	46,415,295	291,299,479	13,750,432	378,924,655	98,095,264	717,076,853	177,119,581

TABLE B-19: TOTAL TRANSPORTATION CHARGE FOR EACH CONTRACTOR<sup>(a)</sup>

(in dollars)

Sheet 4 of 4

Calendar Year	SOUTHERN CALIFORNIA AREA (continued)				FEATHER RIVER AREA				FUTURE CONTRACTOR  South Bay	GRAND TOTAL
	San Geronio Pass Water Agency	The Metropolitan Water District of Southern California	Ventura County Flood Control District	Total	City of Yuba City	County of Butte	Plumas County FC & WCD	Total		
	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
1962	0	0	0	0	0	0	0	0	0	55,535
1963	0	692,304	0	777,219	0	0	0	0	57,714	1,607,110
1964	21,471	1,264,231	9,294	1,585,538	0	0	0	0	95,432	2,745,035
1965	21,624	2,183,808	17,676	2,686,791	0	0	395	395	164,842	4,700,102
1966	37,677	3,899,826	33,297	4,799,507	0	0	551	551	190,714	7,230,520
1967	70,939	7,691,302	68,005	9,425,690	0	0	549	549	247,682	12,530,703
1968	127,900	15,284,721	142,343	18,435,511	0	0	551	551	320,671	24,287,353
1969	196,272	23,061,143	214,414	27,756,440	0	0	3,116	3,116	387,962	35,065,957
1970	286,430	30,506,030	272,433	36,999,662	0	0	14,768	14,768	424,351	45,117,497
1971	405,213	39,883,186	341,328	48,614,674	0	0	15,633	15,633	414,319	57,656,694
1972	530,802	52,623,297	420,094	63,755,419	0	0	16,968	16,968	439,887	74,893,603
1973	581,443	57,056,067	433,292	69,434,311	0	0	16,930	16,930	413,863	79,690,457
1974	604,803	61,503,353	452,331	74,239,525	0	0	17,075	17,075	436,462	85,333,347
1975	637,106	66,568,616	475,667	80,044,477	0	0	17,986	17,986	474,121	92,502,625
1976	671,068	68,909,822	493,950	83,688,268	0	0	17,143	17,143	492,680	96,613,287
1977	675,882	71,347,614	492,177	86,707,011	0	0	17,142	17,142	509,128	100,522,354
1978	687,894	74,139,399	505,469	90,155,384	0	0	17,141	17,141	514,492	104,907,282
1979	695,869	74,431,405	523,722	90,923,159	0	0	17,140	17,140	514,309	106,821,924
1980	774,464	76,640,504	546,505	93,999,651	0	0	17,140	17,140	514,760	110,853,440
1981	810,401	79,123,878	562,580	97,196,069	0	0	17,140	17,140	516,370	117,503,228
1982	826,944	80,005,974	577,999	98,527,735	0	0	17,141	17,141	517,759	121,610,777
1983	1,474,599	126,293,590	733,988	162,460,286	0	0	17,142	17,142	530,581	203,368,861
1984	1,619,850	134,842,993	775,291	174,299,038	0	0	17,140	17,140	528,816	216,260,110
1985	1,705,511	139,415,204	841,064	181,358,306	0	0	17,140	17,140	529,364	226,978,054
1986	1,836,053	141,826,595	938,888	186,523,207	0	0	17,141	17,141	528,992	234,155,997
1987	1,866,655	140,985,065	1,006,475	186,594,331	0	0	17,141	17,141	528,877	237,904,983
1988	2,015,076	147,808,883	1,189,997	196,142,012	0	0	17,141	17,141	528,202	248,280,669
1989	2,113,314	157,328,499	1,407,264	208,109,369	0	0	17,141	17,141	527,704	260,459,238
1990	2,284,058	160,444,759	1,571,169	213,865,111	0	0	17,141	17,141	527,642	269,759,811
1991	2,213,907	161,987,849	1,604,544	215,337,103	0	0	17,141	17,141	527,583	271,576,396
1992	2,273,315	168,230,337	1,626,201	223,025,662	0	0	17,141	17,141	526,974	279,724,271
1993	2,236,308	170,985,383	1,679,467	226,068,967	0	0	17,141	17,141	526,764	282,857,243
1994	2,269,900	175,282,671	1,684,545	231,286,800	0	0	17,141	17,141	526,573	287,382,458
1995	2,276,654	180,961,706	1,704,535	233,571,817	0	0	17,141	17,141	526,742	295,369,996
1996	2,327,916	187,401,965	1,790,537	245,623,888	0	0	17,140	17,140	526,432	301,915,137
1997	2,209,530	180,529,667	1,704,558	236,892,053	0	0	17,140	17,140	526,755	294,811,041
1998	2,209,957	183,562,735	1,715,876	240,749,796	0	0	17,140	17,140	526,306	298,276,574
1999	2,273,474	189,968,354	1,781,992	249,127,914	0	0	17,140	17,140	526,719	306,443,658
2000	2,282,879	194,500,811	1,816,580	254,309,611	0	0	17,142	17,142	527,706	312,314,676
2001	2,219,576	187,506,516	1,728,221	246,217,424	0	0	17,142	17,142	527,425	304,641,499
2002	2,232,359	193,659,216	1,809,327	253,320,857	0	0	17,142	17,142	527,577	311,476,939
2003	2,301,979	198,905,172	1,827,871	259,682,967	0	0	17,142	17,142	527,636	318,236,764
2004	2,257,142	197,075,937	1,808,422	257,431,525	0	0	17,142	17,142	527,466	315,812,523
2005	2,285,495	200,790,407	1,831,039	261,573,524	0	0	17,142	17,142	527,790	319,873,574
2006	2,267,301	201,029,436	1,829,183	261,691,620	0	0	17,142	17,142	527,866	320,404,028
2007	2,203,449	196,004,896	1,767,968	255,416,674	0	0	17,142	17,142	527,575	314,036,439
2008	2,267,810	201,740,545	1,817,615	262,584,495	0	0	17,142	17,142	527,882	321,664,572
2009	2,203,634	202,039,785	1,828,605	261,916,908	0	0	17,142	17,142	527,310	319,875,828
2010	2,260,373	204,712,369	1,839,366	265,625,732	0	0	17,142	17,142	528,052	324,754,258
2011	2,263,881	210,321,514	1,876,918	271,929,106	0	0	17,142	17,142	527,644	331,227,859
2012	2,210,863	205,351,196	1,818,291	265,603,689	0	0	17,142	17,142	527,435	324,490,192
2013	2,239,240	211,101,738	1,879,662	272,281,968	0	0	17,142	17,142	482,609	331,451,284
2014	2,232,061	210,646,270	1,859,871	271,646,863	0	0	17,142	17,142	446,175	330,246,794
2015	2,210,470	212,898,761	1,881,730	273,550,285	0	0	16,747	16,747	391,719	331,142,387
2016	2,207,930	209,973,447	1,847,856	270,534,114	0	0	16,590	16,590	368,353	327,626,775
2017	2,199,383	208,204,310	1,829,076	268,343,382	0	0	16,593	16,593	327,916	325,137,746
2018	2,129,579	199,795,956	1,752,374	258,470,381	0	0	16,590	16,590	252,576	314,689,652
2019	2,071,736	189,489,794	1,657,978	247,189,609	0	0	14,025	14,025	189,636	304,154,850
2020	2,023,751	186,915,599	1,627,739	243,071,446	0	0	2,374	2,374	168,328	299,523,488
2021	1,914,181	178,577,781	1,568,715	232,742,986	0	0	1,566	1,566	164,395	289,149,482
2022	1,850,855	171,694,339	1,530,528	224,723,424	0	0	213	213	163,587	281,107,725
2023	1,828,063	169,403,566	1,527,103	222,068,161	0	0	213	213	162,891	278,414,057
2024	1,814,894	167,372,205	1,512,292	219,798,866	0	0	211	211	162,430	276,134,046
2025	1,801,691	166,397,991	1,507,697	218,601,497	0	0	209	209	160,685	274,914,794
2026	1,788,779	165,557,100	1,503,537	217,572,072	0	0	208	208	160,266	273,527,260
2027	1,779,419	164,745,931	1,498,244	216,605,510	0	0	208	208	159,566	272,514,290
2028	1,776,019	163,946,090	1,489,128	215,716,755	0	0	208	208	159,320	271,463,731
2029	1,773,122	162,429,742	1,469,638	214,073,840	0	0	208	208	159,013	269,570,497
2030	1,769,515	160,683,076	1,447,695	212,175,061	0	0	208	208	158,499	267,052,951
2031	1,764,409	159,419,925	1,433,069	210,746,065	0	0	208	208	157,781	263,484,220
2032	1,758,827	158,784,975	1,426,885	209,956,625	0	0	208	208	157,364	260,475,096
2033	1,754,271	158,337,055	1,422,720	209,376,970	0	0	208	208	157,118	259,420,532
2034	1,750,767	157,962,951	1,419,110	208,861,458	0	0	208	208	157,108	258,837,198
2035	1,747,895	157,648,707	1,416,049	208,072,713	0	0	208	208	157,108	258,009,081
TOTAL	117,313,877	10,320,297,844	90,447,069	13,418,124,878	0	0	860,442	860,442	28,502,351	16,554,630,414

TABLE B-20: CALCULATION OF DELTA WATER RATES

[values in millions of dollars (\$) or millions of acre-feet (AF)<sup>(a)</sup>  
discounted to 1976 at 4.462 percent per annum]

Procedure	Capital Cost Component		Minimum Operation Maintenance, Power and Replacement Component <sup>(b)</sup>		Total Delta Water Rate <sup>(c)</sup>	
<u>In accordance with amendment to Articles 22(e) and 22(g)</u>						
<u>Commencing in 1977:</u>						
Total costs of "initial conservation facilities" to be reimbursed, and project water entitlements to be delivered, during the project repayment period	\$1,097.91 <sup>(d)</sup>	80.51 AF	\$168.52 <sup>(e)</sup>	80.51 AF	\$1,266.43	80.51 AF
Less, project power revenues to be realized during the project repayment period <sup>(f)</sup>	\$ 474.20		\$ 43.07		\$ 517.27	
Less, Delta Water Charges paid, and project water entitlements, prior to 1977 <sup>(g)</sup>	\$ 51.76	7.77 AF	\$ 13.74	7.77 AF	\$ 65.50	7.77 AF
Subtotal	\$ 571.95	72.74 AF	\$ 111.71	72.74 AF	\$ 683.66	72.74 AF
Rate applicable 1977 through 1983	\$ 7.86 per acre-foot		\$ 1.54 per acre-foot		\$ 9.40 per acre-foot	
<u>Commencing in 1984</u>						
Additional costs to be reimbursed during the project repayment period for additional conservation facilities (Phase I)	\$ 197.50		\$ 28.58		\$ 226.08	
Less, Delta Water Charges paid, and project water entitlements delivered, during the period 1977-1983	\$ 102.02	12.98 AF	\$ 19.99	12.98 AF	\$ 122.01	12.98 AF
Cumulative Subtotal	\$ 667.43	59.76 AF	\$ 120.30	59.76 AF	\$ 787.73	59.76 AF
Rate applicable 1984 through 1987	\$11.17 per acre-foot		\$ 2.01 per acre-foot		\$13.18 per acre-foot	
<u>Commencing in 1988</u>						
Additional costs to be reimbursed during the project repayment period for additional conservation facilities (Phase II)	\$ 164.18		\$ 23.37		\$ 187.55	
Less, Delta Water Charges paid, and project water entitlements delivered, during the period 1984-1987	\$ 97.63	8.74 AF	\$ 17.57	8.74 AF	\$ 115.20	8.74 AF
Cumulative Subtotal	\$ 733.98	51.02 AF	\$ 126.10	51.02 AF	\$ 860.08	51.02 AF
Rate applicable 1988 through 1991	\$14.39 per acre-foot		\$ 2.47 per acre-foot		\$16.86 per acre-foot	
<u>Commencing in 1992</u>						
Additional costs to be reimbursed during the project repayment period for additional conservation facilities (Phase III)	\$ 137.83		\$ 19.01		\$ 156.84	
Less, Delta Water Charges paid, and project water entitlements delivered, during the period 1988-1991	\$ 129.65	9.01 AF	\$ 22.25	9.01 AF	\$ 151.90	9.01 AF
Cumulative Subtotal	\$ 742.16	42.01 AF	\$ 122.86	42.01 AF	\$ 865.02	42.01 AF
Rate applicable 1992 through 1995	\$17.67 per acre-foot		\$ 2.92 per acre-foot		\$20.59 per acre-foot	
<u>Commencing in 1996</u>						
Additional costs to be reimbursed during the project repayment period for additional conservation facilities (Phase IV)	\$ 77.19		\$ 10.23		\$ 87.42	
Less, Delta Water Charges paid, and project water entitlements delivered, during the period 1992-1995	\$ 139.06	7.87 AF	\$ 22.98	7.87 AF	\$ 162.04	7.87 AF
Cumulative Subtotal	\$ 680.29	34.14 AF	\$ 110.11	34.14 AF	\$ 790.40	34.14 AF
Rate applicable 1996 through 2035	\$19.93 per acre-foot		\$ 3.22 per acre-foot		\$23.15 per acre-foot	
<u>Calculation Under Original Provisions of Article 22(e) and 22(g)</u>						
<u>Commencing in 1977</u>						
Total costs of "initial" and "additional" project conservation facilities to be reimbursed and project water entitlements to be delivered during the project repayment period	\$1,674.61 <sup>(d)</sup>	80.51 AF	\$249.71 <sup>(e)</sup>	80.51 AF	\$1,924.32	80.51 AF
Less, project power revenues to be realized during the project repayment period <sup>(f)</sup>	\$ 474.20		\$ 43.07		\$ 517.27	
Less, Delta Water Charges paid, and project water entitlements delivered, prior to 1977 <sup>(g)</sup>	\$ 51.76	7.77 AF	\$ 13.74	7.77 AF	\$ 65.50	7.77 AF
TOTAL	\$1,148.65	72.74 AF	\$192.90	72.74 AF	\$1,341.55	72.74 AF
Rate applicable 1977 through 2035	\$15.79 per acre-foot		\$ 2.65 per acre-foot		\$18.44 per acre-foot	

a) Metric conversion is acre-feet times 1.2335 equals cubic dekametres.

b) Considering that all operating costs of project conservation facilities will not vary with annual amounts of project water delivered, and therefore are properly classified as "minimum" OMP&R costs.

c) Metric conversion is dollars per acre-foot times 0.8107 equals dollars per cubic dekametre.

d) Including net credits of \$4,850,000 for settlements as to the magnitude of project capital costs incurred prior to December 31, 1960, and net credits of \$5,896,446 for settlement as to the magnitude of project capital costs incurred during the 1961 through 1972 period.

e) Includes conservation power costs and credits at San Luis.

f) Applying all conservation power revenues at Oroville to reimbursement of capital costs, except that portion equal to specific operating costs of power facilities under the Oroville Revenue Bond Resolution (\$1,500,000 annually beginning in 1970).

g) Applying all Delta Water Charges paid prior to 1970 to reimburse capital costs (the Charge is not divided into components until 1970).

TABLE B-21: TOTAL DELTA WATER

(in dollars)

Sheet 1 of 4

Calendar Year	NORTH BAY AREA			SOUTH BAY AREA				CENTRAL COASTAL AREA		
	Napa County FC & WCD	Selano County FC & WCD	Total	Alameda County FC & WCD, Zone 7	Alameda County Water District	Santa Clara Valley Water District	Total	San Luis Obispo County FC & WCD	Santa Barbara County FC & WCD	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1967	0	0	0	14,000	50,050	177,100	241,150	0	0	0
1968	0	0	0	19,156	29,701	193,245	242,102	0	0	0
1969	0	0	0	30,324	44,096	215,483	289,903	0	0	0
1970	0	0	0	80,908	107,730	585,200	773,838	0	0	0
1971	0	0	0	57,320	123,080	637,120	817,520	0	0	0
1972	0	0	0	99,668	143,877	707,328	950,873	0	0	0
1973	0	0	0	120,880	167,099	782,167	1,070,146	0	0	0
1974	0	0	0	137,684	182,339	818,664	1,138,687	0	0	0
1975	0	0	0	146,204	187,324	804,123	1,137,651	0	0	0
1976	0	0	0	168,489	208,652	862,036	1,239,177	0	0	0
1977	0	0	0	172,931	208,645	827,062	1,208,638	0	0	0
1978	0	0	0	184,209	217,104	827,062	1,228,375	0	0	0
1979	0	0	0	195,487	224,623	827,062	1,247,172	0	0	0
1980	117,480	124,489	241,969	206,766	233,081	827,062	1,266,909	9,398	11,278	20,676
1981	129,229	147,542	276,771	216,164	244,359	827,062	1,287,585	9,398	21,616	31,014
1982	140,977	173,362	314,339	225,562	255,637	827,062	1,308,261	18,797	43,233	62,030
1983	152,725	199,182	351,907	234,961	266,916	827,062	1,328,939	28,195	64,849	93,044
1984	230,671	223,157	453,828	342,711	390,164	1,159,946	1,892,821	59,315	137,085	196,400
1985	247,148	258,199	505,347	355,892	405,981	1,159,946	1,921,819	98,859	228,035	326,894
1986	263,624	304,305	567,929	369,074	423,117	1,159,946	1,952,137	131,812	304,486	436,298
1987	280,101	368,855	648,956	382,255	438,934	1,159,946	1,981,135	164,765	379,619	544,384
1988	379,281	497,954	877,235	505,707	581,563	1,483,408	2,570,678	261,282	603,477	864,759
1989	400,352	636,275	1,036,627	522,564	601,792	1,517,122	2,641,478	337,138	777,104	1,114,242
1990	421,423	774,596	1,196,019	539,421	622,020	1,550,836	2,712,277	421,423	972,644	1,394,067
1991	421,423	774,596	1,196,019	573,135	647,305	1,584,550	2,804,990	421,423	972,644	1,394,067
1992	514,756	774,596	1,289,352	741,248	821,550	1,976,662	3,539,460	514,756	1,188,056	1,702,812
1993	514,756	774,596	1,289,352	782,429	852,435	2,017,842	3,652,706	514,756	1,188,056	1,702,812
1994	514,756	774,596	1,289,352	823,609	864,790	2,059,023	3,747,422	514,756	1,188,056	1,702,812
1995	514,756	774,596	1,289,352	864,790	864,790	2,059,023	3,788,603	514,756	1,188,056	1,702,812
1996	578,770	774,596	1,353,366	1,018,634	972,333	2,315,078	4,306,045	578,770	1,335,800	1,914,570
1997	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
1998	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
1999	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2000	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2001	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2002	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2003	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2004	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2005	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2006	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2007	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2008	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2009	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2010	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2011	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2012	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2013	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2014	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2015	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2016	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2017	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2018	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2019	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2020	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2021	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2022	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2023	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2024	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2025	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2026	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2027	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2028	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2029	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2030	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2031	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2032	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2033	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2034	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
2035	578,770	774,596	1,353,366	1,064,936	972,333	2,315,078	4,352,347	578,770	1,335,800	1,914,570
TOTAL	28,394,258	38,564,736	66,958,994	51,664,686	49,302,074	123,063,270	224,030,030	27,171,629	62,700,294	89,871,923

## CHARGE FOR EACH CONTRACTOR

(in dollars)

Sheet 2 of 4

Calendar Year	SAN JOAQUIN VALLEY AREA									
	Devil's Den Water District	Dudley Ridge Water District	Empire West Side Irrigation District	Hacienda Water District	Kern County Water Agency		County of Kings	Oak Flat Water District	Tulare Lake Basin Water Storage District	Total
					Municipal and Industrial	Agricultural				
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1967	0	0	0	0	0	0	0	0	0	0
1968	13,060	40,695	10,469	4,511	0	165,522	3,177	8,073	94,097	339,604
1969	17,804	61,267	3,281	3,744	0	337,686	4,200	8,805	98,734	535,521
1970	37,905	104,405	19,750	16,625	0	964,915	8,645	17,290	211,470	1,381,205
1971	48,508	129,596	21,720	16,652	0	1,377,772	9,412	20,272	247,608	1,871,540
1972	61,891	160,756	24,113	20,898	0	2,175,835	11,253	43,131	884,159	3,382,036
1973	77,328	195,541	26,664	25,776	386,639	2,373,166	13,333	27,553	347,531	3,473,531
1974	90,239	224,202	27,909	30,700	446,543	2,781,594	13,954	29,770	414,438	4,059,349
1975	97,774	329,688	27,413	32,896	481,560	3,041,048	14,620	33,702	794,695	4,853,396
1976	114,612	414,245	29,388	39,712	549,547	3,931,786	15,673	35,966	837,439	5,968,368
1977	119,360	285,712	28,195	39,473	569,545	3,975,539	15,977	34,774	515,034	5,583,609
1978	119,360	305,449	28,195	43,233	602,440	4,419,145	17,857	36,654	551,688	6,124,021
1979	119,360	325,186	28,195	46,052	635,334	4,852,413	18,797	37,594	588,342	6,651,273
1980	119,360	344,923	28,195	48,872	668,229	5,295,079	20,677	39,473	624,996	7,189,804
1981	119,360	364,659	28,195	52,631	703,003	5,795,076	21,616	40,413	661,650	7,786,603
1982	119,360	385,336	28,195	55,451	748,116	6,256,539	23,496	42,293	698,304	8,357,090
1983	119,360	403,193	28,195	58,270	784,769	6,781,912	26,316	43,233	734,958	8,980,206
1984	167,401	594,472	39,544	65,678	1,167,855	10,175,888	40,862	63,270	1,082,177	13,417,147
1985	167,401	622,153	39,544	90,950	1,237,715	10,823,086	44,816	64,588	1,133,583	14,223,836
1986	167,401	649,833	39,544	94,905	1,297,030	11,465,010	48,770	67,224	1,186,308	15,016,025
1987	167,401	677,514	39,544	98,859	1,372,163	12,118,798	52,725	68,542	1,237,715	15,833,261
1988	214,083	901,845	50,571	131,484	1,835,718	16,278,721	67,428	91,027	1,648,606	21,219,483
1989	214,083	937,244	50,571	138,227	1,908,203	16,841,742	67,428	94,399	1,714,348	21,966,245
1990	214,083	972,644	50,571	143,284	2,016,087	17,426,676	67,428	96,084	1,854,260	22,841,117
1991	214,083	972,644	50,571	143,284	2,016,087	17,426,676	67,428	96,084	1,854,260	22,841,117
1992	261,496	1,188,056	61,771	175,017	2,462,591	21,286,179	82,361	117,364	2,264,925	27,899,760
1993	261,496	1,188,056	61,771	175,017	2,462,591	21,286,179	82,361	117,364	2,264,925	27,899,760
1994	261,496	1,188,056	61,771	175,017	2,462,591	21,286,179	82,361	117,364	2,264,925	27,899,760
1995	261,496	1,188,056	61,771	175,017	2,462,591	21,286,179	82,361	117,364	2,264,925	27,899,760
1996	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
1997	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
1998	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
1999	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2000	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2001	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2002	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2003	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2004	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2005	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2006	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2007	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2008	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2009	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2010	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2011	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2012	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2013	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2014	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2015	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2016	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2017	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2018	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2019	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2020	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2021	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2022	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2023	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2024	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2025	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2026	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2027	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2028	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2029	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2030	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2031	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2032	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2033	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2034	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
2035	294,015	1,335,800	69,452	196,782	2,768,833	23,933,277	92,603	131,959	2,546,586	31,369,307
TOTAL	15,727,161	68,587,426	3,773,896	10,033,515	140,030,267	1,209,557,420	4,729,452	6,888,030	130,939,540	1,590,266,707

TABLE B-21: TOTAL DELTA WATER

(in dollars)

Sheet 3 of 4

Calendar Year	SOUTHERN CALIFORNIA AREA									
	Antelope Valley East Kern Water Agency	Castaic Lake Water Agency	Coachella Valley County Water District	Crestline Lake Arrowhead Water Agency	Desert Water Agency	Littlerock Creek Irrigation District	Mojave Water Agency	Palmdale Water District	San Bernardino Valley Municipal Water District	San Gabriel Valley Municipal Water District
	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)
1967	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0
1972	160,756	12,860	41,797	4,662	64,303	1,367	67,518	13,021	369,739	85,202
1973	222,207	29,835	51,552	7,279	79,994	2,577	95,104	26,131	54,908	14,338
1974	279,090	53,027	59,539	10,791	93,030	3,721	121,869	39,631	465,150	114,427
1975	319,822	68,533	63,964	13,250	100,515	4,752	140,722	50,989	479,733	119,705
1976	431,018	93,061	74,449	17,045	117,550	6,269	174,366	67,591	538,772	137,142
1977	469,922	107,142	79,144	19,079	122,180	6,861	189,848	77,255	540,410	139,097
1978	535,711	125,939	86,860	21,804	131,578	8,647	211,465	87,781	563,906	147,555
1979	592,102	143,796	94,576	24,530	140,977	9,774	234,021	96,428	587,402	156,014
1980	650,372	166,352	102,293	27,255	159,773	10,808	255,637	105,075	615,598	163,533
1981	704,883	188,909	113,768	29,981	178,570	11,936	278,194	109,962	643,793	171,991
1982	764,093	207,705	125,244	32,707	197,367	12,970	299,810	115,789	671,988	179,510
1983	824,243	231,202	136,719	35,432	216,164	14,098	322,366	121,616	700,184	187,029
1984	1,239,033	354,574	207,841	53,516	329,530	21,222	483,750	178,737	1,028,134	272,851
1985	1,323,393	383,573	223,935	57,338	355,892	22,803	514,067	186,909	1,074,268	287,350
1986	1,406,434	407,299	240,030	61,161	382,255	24,253	545,702	195,082	1,120,402	305,804
1987	1,489,476	433,662	256,124	64,983	415,208	25,835	576,019	203,254	1,173,127	324,258
1988	2,012,715	595,049	348,129	87,993	573,135	34,894	775,418	270,385	1,567,693	438,280
1989	2,118,914	630,449	368,711	92,882	615,277	36,917	817,560	280,836	1,635,121	461,879
1990	2,226,798	662,477	389,395	97,770	642,248	38,771	856,331	291,625	1,710,977	485,479
1991	2,332,997	699,562	389,395	97,770	642,248	38,771	856,331	291,625	1,729,519	485,479
1992	2,849,688	854,495	475,634	119,423	784,488	47,358	1,045,984	356,211	2,112,558	592,999
1993	2,849,688	854,495	475,634	119,423	784,488	47,358	1,045,984	356,211	2,112,558	592,999
1994	2,849,688	854,495	475,634	119,423	784,488	47,358	1,045,984	356,211	2,112,558	592,999
1995	2,849,688	854,495	475,634	119,423	784,488	47,358	1,045,984	356,211	2,112,558	592,999
1996	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
1997	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
1998	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
1999	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2000	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2001	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2002	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2003	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2004	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2005	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2006	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2007	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2008	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2009	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2010	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2011	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2012	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2013	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2014	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2015	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2016	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2017	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2018	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2019	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2020	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2021	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2022	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2023	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2024	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2025	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2026	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2027	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2028	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2029	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2030	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2031	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2032	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2033	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2034	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
2035	3,204,068	960,757	534,783	134,275	882,045	53,247	1,176,060	400,509	2,375,270	666,742
TOTAL	159,665,451	47,443,266	26,747,321	6,705,920	43,977,546	2,656,558	59,042,434	20,254,926	120,731,856	33,718,599



## CHARGE FOR EACH CONTRACTOR

(in dollars)

Sheet 4 of 4

Calendar Year	SOUTHERN CALIFORNIA AREA (continued)				FEATHER RIVER AREA				FUTURE CONTRACTOR	GRAND TOTAL
	San Geronio Pass Water Agency	The Metropolitan Water District of Southern California	Ventura County Flood Control District	Total	City of Yuba City	County of Butte	Plumas County FC & WCD	Total		
	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
1967	0	0	0	0	0	0	0	0	0	241,150
1968	0	0	0	0	0	1,050	875	1,925	0	583,631
1969	0	0	0	0	0	1,225	929	2,154	0	827,578
1970	0	0	0	0	0	3,848	1,995	5,843	0	2,160,886
1971	0	0	0	0	0	4,546	3,186	7,732	0	2,696,792
1972	0	2,043,211	0	2,864,436	0	4,929	3,778	8,707	0	7,206,052
1973	0	2,317,893	0	2,901,818	0	7,059	4,444	11,503	0	7,456,998
1974	0	4,231,933	0	5,472,208	0	8,336	4,931	13,267	0	10,683,511
1975	0	5,073,286	0	6,435,271	0	12,358	5,117	17,475	0	12,443,793
1976	0	6,422,167	0	8,079,430	0	7,004	5,780	12,784	0	15,299,759
1977	0	7,104,278	0	8,855,216	0	16,917	5,827	22,744	0	15,670,207
1978	0	8,047,881	0	9,969,127	0	20,677	6,109	26,786	0	17,348,309
1979	0	8,990,544	0	11,070,164	0	24,436	6,391	30,827	0	18,999,436
1980	63,909	9,934,147	9,398	12,264,150	0	37,594	6,673	44,267	0	21,027,775
1981	73,308	10,876,811	18,797	13,400,903	75,958	51,221	6,955	134,134	0	22,917,010
1982	82,706	11,819,474	28,195	14,537,558	83,192	64,849	7,237	155,278	0	24,734,556
1983	92,105	12,763,077	37,594	15,681,829	91,331	78,477	7,519	177,327	0	26,613,252
1984	142,357	19,222,148	65,906	23,599,599	99,469	129,176	10,940	239,585	0	39,799,380
1985	155,538	20,545,541	79,087	25,209,694	107,607	161,470	11,336	280,413	0	42,468,003
1986	170,038	21,871,570	105,450	26,835,480	119,363	193,764	11,731	324,858	0	45,132,727
1987	184,537	23,196,280	131,812	28,474,575	132,023	226,058	12,127	370,208	0	47,852,519
1988	254,539	31,360,600	219,140	38,537,970	144,682	347,252	16,183	508,117	0	64,578,242
1989	273,082	33,056,406	269,711	40,657,745	159,150	405,409	16,857	581,416	0	67,997,753
1990	291,625	33,907,680	337,138	41,938,314	173,619	463,565	17,531	654,715	0	70,736,509
1991	291,625	33,907,680	337,138	42,100,140	173,619	463,565	18,205	655,389	0	70,991,722
1992	356,211	41,417,246	411,805	51,424,100	173,619	566,231	23,061	762,911	0	86,618,395
1993	356,211	41,417,246	411,805	51,424,100	173,619	566,231	23,885	763,735	0	86,732,465
1994	356,211	41,417,246	411,805	51,424,100	173,619	566,231	24,708	764,558	0	86,828,004
1995	356,211	41,417,246	411,805	51,424,100	173,619	566,231	25,738	765,588	0	86,870,215
1996	400,509	46,567,796	463,016	57,819,077	173,619	636,646	30,096	840,361	0	97,602,726
1997	400,509	46,567,796	463,016	57,819,077	173,619	636,646	31,254	841,519	0	97,650,186
1998	400,509	46,567,796	463,016	57,819,077	173,619	636,646	32,411	842,676	0	97,651,343
1999	400,509	46,567,796	463,016	57,819,077	173,619	636,646	33,569	843,834	0	97,652,501
2000	400,509	46,567,796	463,016	57,819,077	173,619	636,646	34,958	845,223	0	97,653,890
2001	400,509	46,567,796	463,016	57,819,077	173,619	636,646	36,347	846,612	0	97,655,279
2002	400,509	46,567,796	463,016	57,819,077	173,619	636,646	37,736	848,001	0	97,656,668
2003	400,509	46,567,796	463,016	57,819,077	173,619	636,646	39,125	849,390	0	97,658,057
2004	400,509	46,567,796	463,016	57,819,077	173,619	636,646	40,514	850,779	0	97,659,446
2005	400,509	46,567,796	463,016	57,819,077	173,619	636,646	41,903	852,168	0	97,660,835
2006	400,509	46,567,796	463,016	57,819,077	173,619	636,646	43,293	853,788	0	97,662,455
2007	400,509	46,567,796	463,016	57,819,077	173,619	636,646	45,144	855,409	0	97,664,076
2008	400,509	46,567,796	463,016	57,819,077	173,619	636,646	46,765	857,030	0	97,665,697
2009	400,509	46,567,796	463,016	57,819,077	173,619	636,646	48,385	858,650	0	97,667,317
2010	400,509	46,567,796	463,016	57,819,077	173,619	636,646	50,006	860,271	0	97,668,938
2011	400,509	46,567,796	463,016	57,819,077	173,619	636,646	51,858	862,123	0	97,670,790
2012	400,509	46,567,796	463,016	57,819,077	173,619	636,646	53,710	863,975	0	97,672,642
2013	400,509	46,567,796	463,016	57,819,077	173,619	636,646	55,793	866,058	0	97,674,725
2014	400,509	46,567,796	463,016	57,819,077	173,619	636,646	57,877	868,142	0	97,676,809
2015	400,509	46,567,796	463,016	57,819,077	173,619	636,646	60,192	870,457	0	97,679,124
2016	400,509	46,567,796	463,016	57,819,077	173,619	636,646	62,507	872,772	0	97,681,439
2017	400,509	46,567,796	463,016	57,819,077	173,619	636,646	62,507	872,772	0	97,681,439
2018	400,509	46,567,796	463,016	57,819,077	173,619	636,646	62,507	872,772	0	97,681,439
2019	400,509	46,567,796	463,016	57,819,077	173,619	636,646	62,507	872,772	0	97,681,439
2020	400,509	46,567,796	463,016	57,819,077	173,619	636,646	62,507	872,772	0	97,681,439
2021	400,509	46,567,796	463,016	57,819,077	173,619	636,646	62,507	872,772	0	97,681,439
2022	400,509	46,567,796	463,016	57,819,077	173,619	636,646	62,507	872,772	0	97,681,439
2023	400,509	46,567,796	463,016	57,819,077	173,619	636,646	62,507	872,772	0	97,681,439
2024	400,509	46,567,796	463,016	57,819,077	173,619	636,646	62,507	872,772	0	97,681,439
2025	400,509	46,567,796	463,016	57,819,077	173,619	636,646	62,507	872,772	0	97,681,439
2026	400,509	46,567,796	463,016	57,819,077	173,619	636,646	62,507	872,772	0	97,681,439
2027	400,509	46,567,796	463,016	57,819,077	173,619	636,646	62,507	872,772	0	97,681,439
2028	400,509	46,567,796	463,016	57,819,077	173,619	636,646	62,507	872,772	0	97,681,439
2029	400,509	46,567,796	463,016	57,819,077	173,619	636,646	62,507	872,772	0	97,681,439
2030	400,509	46,567,796	463,016	57,819,077	173,619	636,646	62,507	872,772	0	97,681,439
2031	400,509	46,567,796	463,016	57,819,077	173,619	636,646	62,507	872,772	0	97,681,439
2032	400,509	46,567,796	463,016	57,819,077	173,619	636,646	62,507	872,772	0	97,681,439
2033	400,509	46,567,796	463,016	57,819,077	173,619	636,646	62,507	872,772	0	97,681,439
2034	400,509	46,567,796	463,016	57,819,077	173,619	636,646	62,507	872,772	0	97,681,439
2035	400,509	46,567,796	463,016	57,819,077	173,619	636,646	62,507	872,772	0	97,681,439
TOTAL	19,520,573	21,807,226	21,807,226	2,897,345,107	8,999,249	30,465,549	2,411,354	41,876,152	0	4,910,348,913

TABLE B-22: TOTAL TRANSPORTATION<sup>(a)</sup> AND

(in dollars)

Sheet 1 of 4

Calendar Year	NORTH BAY AREA			SOUTH BAY AREA				CENTRAL COASTAL AREA		
	Napa County FC & WCD	Solano County FC & WCD	Total	Alameda County FC & WCD, Zone 7	Alameda County Water District	Santa Clara Valley Water District	Total	San Luis Obispo County FC & WCD	Santa Barbara County FC & WCD	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1962	0	0	0	11,751	43,784	0	55,535	0	0	0
1963	0	0	0	148,333	184,566	439,278	772,177	0	0	0
1964	0	0	0	166,424	260,086	609,075	1,035,585	8,174	20,306	28,480
1965	0	0	0	240,259	359,842	1,136,956	1,737,057	13,780	33,561	47,341
1966	18,559	0	18,559	265,982	369,847	1,388,415	2,024,244	22,828	54,897	77,725
1967	41,855	0	41,855	354,495	497,986	1,834,019	2,686,500	40,844	97,128	137,972
1968	127,204	0	127,204	399,768	571,442	2,133,924	3,105,134	66,233	156,586	222,819
1969	247,853	0	247,853	460,184	517,935	2,239,137	3,217,256	120,736	283,960	404,696
1970	269,463	0	269,463	525,913	574,146	2,736,701	3,836,760	133,759	314,452	448,211
1971	214,178	0	214,178	463,450	608,874	2,756,662	3,828,986	134,818	317,010	451,828
1972	218,240	0	218,240	595,060	755,477	2,976,730	4,327,267	140,975	331,498	472,473
1973	215,548	26,540	242,088	580,263	649,165	3,067,028	4,296,456	138,180	325,024	463,204
1974	233,863	27,908	261,771	620,397	679,815	3,273,910	4,574,122	139,750	328,747	468,497
1975	233,821	30,703	264,524	691,191	737,249	3,224,081	4,652,521	153,707	361,369	515,076
1976	240,643	34,746	275,389	756,784	837,928	3,179,866	4,774,578	256,049	600,443	856,492
1977	261,137	52,335	313,472	801,813	879,188	3,266,716	4,947,717	259,165	608,076	867,241
1978	295,326	84,652	379,978	835,917	910,503	3,330,210	5,076,630	290,621	691,697	982,318
1979	331,006	121,077	452,083	851,153	919,042	3,315,996	5,086,191	336,673	814,549	1,151,222
1980	505,501	270,907	776,408	875,696	939,542	3,338,660	5,153,898	501,341	1,219,999	1,721,340
1981	649,370	446,833	1,096,203	917,709	987,382	3,434,652	5,339,743	994,370	2,599,253	3,593,623
1982	951,598	788,763	1,740,361	933,611	1,005,965	3,429,263	5,368,839	1,591,685	4,137,646	5,729,331
1983	1,164,623	903,107	2,067,730	1,709,469	1,885,679	6,084,100	9,679,248	1,947,635	5,134,378	7,082,013
1984	1,341,126	929,623	2,270,749	1,833,966	2,030,667	6,351,375	10,216,008	2,173,121	5,674,836	7,847,957
1985	1,386,522	990,025	2,376,547	1,911,953	2,122,438	6,444,821	10,479,212	2,179,628	6,195,577	8,375,205
1986	1,377,829	1,036,745	2,414,574	1,915,902	2,134,739	6,299,879	10,350,520	2,223,944	6,549,106	8,773,050
1987	1,380,337	1,106,264	2,486,601	1,967,563	2,196,633	6,309,467	10,473,663	2,321,189	7,104,965	9,426,154
1988	1,494,474	1,283,127	2,777,601	2,090,990	2,341,137	6,529,021	10,961,148	2,487,480	7,947,461	10,434,941
1989	1,521,403	1,443,590	2,964,993	2,102,368	2,356,792	6,516,023	10,975,183	2,549,926	8,531,331	11,081,257
1990	1,558,913	1,645,472	3,204,385	2,156,661	2,421,737	6,628,418	11,206,816	2,718,588	9,665,656	12,384,244
1991	1,565,904	1,646,481	3,212,385	2,211,548	2,490,479	6,712,969	11,414,996	2,788,038	9,736,908	12,524,946
1992	1,651,456	1,637,010	3,288,466	2,380,687	2,684,307	7,098,928	12,163,922	2,933,388	9,827,048	12,760,436
1993	1,661,375	1,641,091	3,302,466	2,437,548	2,751,450	7,175,817	12,364,815	3,004,304	9,815,615	12,819,919
1994	1,660,051	1,636,415	3,296,466	2,472,932	2,745,588	7,191,912	12,410,432	3,051,711	9,698,733	12,750,444
1995	1,661,014	1,634,452	3,295,466	2,559,718	2,769,704	7,249,346	12,578,768	3,220,844	10,116,950	13,337,794
1996	1,726,276	1,631,500	3,357,776	2,681,713	2,811,974	7,350,073	12,843,760	3,337,123	10,164,668	13,501,791
1997	1,727,042	1,627,734	3,354,776	2,792,924	2,857,491	7,458,459	13,108,874	3,411,102	10,157,441	13,568,543
1998	1,800,818	1,621,958	3,422,776	2,787,463	2,824,270	7,379,341	12,991,074	3,437,252	9,985,696	13,422,948
1999	1,823,237	1,630,539	3,453,776	2,844,296	2,858,993	7,462,034	13,165,323	3,544,696	10,098,930	13,643,626
2000	1,831,278	1,631,685	3,462,963	2,881,638	2,871,808	7,492,996	13,246,442	3,627,790	10,124,512	13,752,302
2001	1,815,897	1,622,866	3,437,963	2,875,073	2,839,114	7,415,141	13,129,328	3,663,001	9,947,347	13,610,348
2002	1,834,528	1,629,435	3,463,963	2,900,574	2,839,978	7,417,203	13,157,755	3,788,314	10,038,136	13,826,450
2003	1,828,782	1,624,181	3,452,963	2,947,792	2,862,357	7,470,492	13,280,641	3,853,622	9,963,676	13,817,298
2004	1,829,858	1,623,105	3,452,963	2,963,261	2,853,050	7,448,329	13,264,640	3,897,768	9,844,802	13,742,570
2005	1,834,916	1,624,047	3,458,963	3,013,698	2,877,442	7,506,414	13,397,554	3,993,416	9,857,355	13,850,771
2006	1,839,630	1,623,333	3,462,963	3,038,080	2,888,526	7,532,811	13,459,417	3,993,461	9,857,458	13,850,919
2007	1,831,466	1,616,497	3,447,963	3,035,257	2,873,904	7,497,980	13,407,141	3,949,892	9,755,745	13,705,637
2008	1,846,371	1,621,592	3,467,963	3,068,657	2,893,202	7,543,943	13,505,802	3,990,957	9,851,612	13,842,569
2009	1,829,530	1,611,433	3,440,963	3,027,232	2,843,212	7,424,893	13,295,337	3,919,284	9,684,283	13,603,567
2010	1,882,170	1,673,793	3,555,963	3,121,554	2,918,107	7,603,252	13,642,913	4,004,984	9,884,361	13,889,345
2011	1,877,847	1,668,116	3,545,963	3,083,515	2,883,354	7,520,483	13,487,352	3,970,840	9,804,649	13,775,489
2012	1,864,202	1,657,761	3,521,963	3,055,439	2,857,701	7,459,398	13,372,538	3,919,408	9,684,570	13,603,978
2013	1,881,815	1,664,148	3,545,963	2,982,748	2,790,386	7,180,783	12,953,917	3,963,748	9,788,091	13,751,839
2014	1,888,853	1,664,110	3,552,963	2,944,029	2,732,947	7,010,333	12,687,309	3,963,184	9,785,550	13,748,734
2015	1,976,196	1,662,767	3,638,963	2,900,174	2,664,928	6,635,240	12,200,342	3,952,831	9,761,209	13,714,040
2016	1,969,369	1,664,035	3,633,404	2,877,379	2,637,861	6,456,393	11,971,633	3,950,548	9,755,663	13,706,211
2017	1,952,150	1,663,958	3,616,108	2,847,626	2,610,511	6,346,192	11,804,329	3,940,297	9,731,567	13,671,864
2018	1,877,696	1,662,052	3,539,748	2,805,367	2,570,618	6,223,161	11,599,146	3,918,917	9,681,460	13,600,377
2019	1,836,024	1,658,876	3,494,900	2,781,385	2,548,890	6,152,775	11,483,050	3,913,579	9,668,881	13,582,460
2020	1,864,809	1,654,095	3,518,904	2,766,061	2,534,448	6,110,925	11,411,434	3,922,825	9,690,370	13,613,195
2021	1,862,332	1,654,095	3,516,427	2,763,098	2,531,594	6,104,106	11,398,798	3,921,579	9,687,376	13,608,955
2022	1,860,950	1,654,095	3,515,045	2,762,511	2,530,893	6,099,964	11,393,368	3,920,632	9,685,049	13,605,681
2023	1,859,934	1,627,554	3,487,488	2,761,919	2,530,329	6,096,855	11,389,103	3,920,169	9,683,917	13,604,086
2024	1,857,054	1,626,187	3,483,241	2,761,434	2,529,841	6,095,001	11,386,276	3,919,819	9,683,041	13,602,860
2025	1,848,496	1,623,391	3,471,887	2,760,679	2,528,982	6,091,424	11,381,085	3,919,420	9,682,076	13,601,496
2026	1,843,369	1,619,348	3,462,717	2,759,861	2,528,220	6,089,398	11,377,479	3,816,573	9,441,821	13,258,394
2027	1,829,449	1,601,760	3,431,209	2,758,952	2,527,274	6,086,476	11,372,702	3,814,703	9,437,096	13,251,799
2028	1,801,957	1,569,443	3,371,400	2,758,452	2,526,792	6,085,166	11,370,410	3,788,462	9,365,645	13,154,107
2029	1,764,138	1,533,018	3,297,156	2,757,554	2,526,009	6,083,301	11,366,906	3,742,232	9,242,382	12,984,614
2030	1,730,914	1,507,677	3,238,591	2,756,164	2,524,700	6,080,181	11,361,045	3,586,966	8,848,215	12,435,181
2031	1,610,702	1,362,242	2,972,944	2,754,162	2,522,870	6,075,820	11,352,852	3,094,902	7,481,551	10,576,453
2032	1,376,016	1,131,265	2,507,281	2,752,999	2,521,806	6,073,285	11,348,090	2,635,575	6,197,126	8,832,701
2033	1,314,235	1,082,224	2,396,459	2,752,313	2,521,179	6,071,792	11,345,284	2,542,256	5,934,532	8,476,788
2034	1,313,046	1,080,577	2,393,623	2,752,287	2,521,155	6,071,734	11,345,176	2,527,812	5,889,973	8,417,785
2035	1,313,046	1,080,577	2,393,623	2,752,287	2,521,155	6,071,733	11,345,175	2,520,035	5,869,256	8,389,291
TOTAL	95,936,590	82,204,135	178,140,725	153,635,107	151,858,985	408,078,635	713,572,727	186,443,458	491,991,853	678,435,311

a) Unadjusted for prior overpayments or underpayments of charges. See Table B-19 for total Transportation Charge for each contractor.

b) See Table B-21 for total Delta Water Charge for each contractor.

# DELTA WATER<sup>(b)</sup> CHARGE FOR EACH CONTRACTOR

(in dollars)

Sheet 2 of 4

Calendar Year	SAN JOAQUIN VALLEY AREA									
	Devil's Den Water District	Dudley Ridge Water District	Empire West Side Irrigation District	Hacienda Water District	Kern County Water Agency		County of Kings	Oak Flat Water District	Tulare Lake Basin Water Storage District	Total
					Municipal and Industrial	Agricultural				
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1962	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	63,676	0	0	0	0	63,676
1966	0	0	0	0	119,220	0	0	0	0	119,220
1967	0	1-	0	0	231,625	17-	0	0	2-	231,605
1968	82,899	210,791	20,551	9,897	392,305	1,625,240	15,792	18,448	281,246	2,657,169
1969	134,449	226,063	15,154	26,932	467,385	2,583,375	15,495	18,088	387,117	3,874,058
1970	178,165	292,926	38,545	52,111	513,951	3,718,261	20,063	29,322	435,981	5,279,325
1971	192,821	312,961	41,290	43,431	544,718	4,978,204	25,762	33,546	633,403	6,806,136
1972	228,170	364,404	44,454	49,333	569,603	6,827,606	25,030	61,702	1,825,956	9,996,258
1973	233,346	380,402	43,075	51,589	964,090	6,942,272	27,334	37,971	687,203	9,367,282
1974	255,703	480,454	44,322	59,328	1,081,575	7,629,629	28,060	41,140	913,720	10,533,931
1975	280,135	643,595	44,502	66,442	1,132,014	8,883,994	29,570	46,161	1,398,554	12,524,967
1976	314,016	655,146	46,486	74,516	1,228,779	10,058,456	30,766	48,641	1,259,476	13,716,282
1977	335,700	548,559	46,218	77,442	1,297,489	10,589,424	31,788	48,933	977,337	13,952,890
1978	343,031	579,284	45,957	83,514	1,340,304	11,623,929	33,894	50,347	1,033,475	15,133,735
1979	344,382	633,708	47,826	91,334	1,402,673	12,833,205	36,318	54,361	1,132,458	16,576,265
1980	343,761	654,098	46,703	94,334	1,431,823	13,646,131	37,950	54,885	1,169,916	17,479,601
1981	351,773	705,474	48,038	103,393	1,503,512	15,051,479	40,312	58,386	1,263,686	19,126,053
1982	345,858	714,999	46,103	104,569	1,533,909	15,628,424	41,163	57,778	1,278,528	19,751,331
1983	569,579	1,114,325	71,763	162,774	2,336,640	25,864,154	68,581	85,690	2,012,451	32,285,957
1984	605,792	1,288,293	79,835	187,507	2,734,332	29,634,291	82,906	102,063	2,325,579	37,040,598
1985	628,589	1,419,528	84,580	209,281	2,952,278	32,754,530	95,247	110,519	2,565,624	40,820,176
1986	625,259	1,519,277	87,020	223,731	3,123,858	34,964,803	105,699	119,934	2,751,321	43,520,902
1987	636,416	1,659,894	91,643	244,139	3,357,303	38,137,763	119,197	130,596	3,009,001	47,385,952
1988	673,908	1,868,626	99,734	274,451	3,851,185	42,513,867	129,997	148,591	3,391,420	52,951,779
1989	660,129	1,884,194	96,792	279,863	3,952,206	42,975,098	126,084	146,965	3,420,852	53,542,183
1990	680,378	1,990,893	98,792	295,350	4,204,511	45,385,496	128,745	152,316	3,761,471	56,697,952
1991	681,756	1,994,757	98,993	295,920	4,206,197	45,450,845	129,014	152,120	3,768,833	56,778,435
1992	729,231	2,234,770	111,473	331,278	4,684,460	49,733,013	145,650	176,802	4,226,377	62,373,054
1993	730,137	2,229,220	111,183	330,460	4,684,244	49,680,216	145,264	175,273	4,215,804	62,301,801
1994	723,437	2,211,681	110,273	327,877	4,649,070	49,211,199	144,056	173,970	4,182,385	61,733,948
1995	731,491	2,252,316	112,383	333,862	4,708,800	50,055,956	146,862	178,311	4,259,814	62,779,795
1996	749,738	2,342,027	117,050	347,078	4,971,236	51,689,864	153,092	186,668	4,430,885	64,987,638
1997	767,706	2,408,082	120,482	356,809	5,003,119	52,629,232	157,657	193,651	4,556,752	66,332,490
1998	762,132	2,397,574	119,934	355,261	5,005,740	52,608,539	156,933	193,282	4,536,729	66,136,124
1999	759,747	2,361,755	118,074	349,985	4,989,831	52,107,768	154,456	188,654	4,468,480	65,498,750
2000	764,526	2,379,942	119,018	352,663	5,014,364	52,509,008	155,702	189,773	4,503,104	65,988,100
2001	767,756	2,422,954	121,253	358,999	5,028,229	53,053,492	158,678	195,038	4,585,060	66,691,459
2002	765,121	2,392,478	119,669	354,510	5,016,392	52,629,800	156,570	191,249	4,526,996	66,152,785
2003	765,429	2,407,755	120,462	356,760	5,028,379	52,861,865	157,626	193,335	4,556,102	66,447,713
2004	763,214	2,403,745	120,254	356,169	5,031,902	52,917,608	157,349	193,107	4,548,459	66,365,807
2005	760,285	2,389,612	119,519	354,089	5,015,827	52,528,502	156,372	191,684	4,521,530	66,037,420
2006	763,916	2,404,883	120,312	356,337	5,030,471	52,806,588	157,426	193,131	4,550,627	66,383,691
2007	762,656	2,416,208	120,902	358,006	5,024,790	52,895,890	158,211	195,024	4,572,210	66,503,897
2008	767,022	2,419,420	121,067	358,479	5,044,558	53,066,652	158,433	194,350	4,578,328	66,708,309
2009	757,080	2,401,487	120,137	355,836	4,998,881	52,535,672	157,196	193,745	4,544,157	66,064,191
2010	765,654	2,408,000	120,475	356,796	5,035,358	52,891,236	157,643	192,975	4,556,564	66,484,701
2011	768,213	2,428,336	121,530	359,793	5,056,689	53,250,558	159,049	195,273	4,595,312	66,934,753
2012	763,459	2,430,219	121,630	360,069	5,046,178	53,157,012	159,182	196,384	4,598,904	66,833,037
2013	771,408	2,449,611	122,637	362,928	5,082,885	53,624,074	160,520	197,524	4,635,849	67,407,436
2014	769,379	2,436,857	121,975	361,047	5,071,423	53,409,122	159,637	196,208	4,611,550	67,137,198
2015	765,494	2,418,538	121,021	358,348	4,982,685	53,044,108	158,374	194,667	4,576,646	66,619,881
2016	764,671	2,408,548	120,502	356,877	4,922,863	52,904,101	157,681	193,210	4,557,607	66,386,060
2017	765,557	2,411,451	120,655	357,305	4,813,877	52,964,043	157,882	193,234	4,563,140	66,347,144
2018	764,572	2,408,101	120,479	356,811	4,713,722	52,937,515	149,244	193,220	4,556,760	66,200,424
2019	772,275	2,445,539	122,424	362,327	4,725,311	53,787,337	151,331	196,129	4,628,087	67,190,760
2020	769,737	2,430,552	121,647	360,118	4,661,610	53,439,188	150,051	194,957	4,599,537	66,727,397
2021	769,737	2,430,552	121,647	360,118	4,640,297	53,439,188	149,912	194,957	4,599,537	66,705,945
2022	769,737	2,430,552	121,647	360,118	4,630,416	53,439,188	149,845	194,957	4,599,537	66,695,997
2023	769,737	2,430,552	121,647	360,118	4,626,153	53,439,188	149,816	194,957	4,599,537	66,691,705
2024	769,737	2,430,552	121,647	360,118	4,624,214	53,439,188	149,802	194,957	4,599,537	66,689,752
2025	769,737	2,430,552	121,647	360,118	4,622,007	53,439,188	149,782	194,957	4,599,537	66,687,525
2026	769,737	2,430,552	121,647	360,118	4,620,228	53,439,188	149,750	194,957	4,599,537	66,685,714
2027	769,737	2,430,552	121,647	360,118	4,617,443	53,439,188	149,707	194,957	4,599,537	66,682,886
2028	769,737	2,430,552	121,647	360,118	4,615,720	53,439,188	149,665	194,957	4,599,537	66,681,121
2029	769,737	2,430,552	121,647	360,118	4,613,032	53,439,188	149,582	194,957	4,599,537	66,678,350
2030	769,737	2,430,552	121,647	360,118	4,608,775	53,439,188	149,445	194,957	4,599,537	66,673,956
2031	769,737	2,430,552	121,647	360,118	4,602,517	53,439,188	149,254	194,957	4,599,537	66,667,507
2032	769,737	2,430,552	121,647	360,118	4,597,561	53,439,188	149,120	194,957	4,599,537	66,662,417
2033	769,737	2,430,552	121,647	360,118	4,592,573	53,439,188	148,986	194,957	4,599,537	66,657,295
2034	769,737	2,430,552	121,647	360,118	4,586,870	53,439,188	148,824	194,957	4,599,537	66,651,430
2035	769,737	2,430,552	121,647	360,118	4,576,329	53,439,188	148,488	194,957	4,599,537	66,640,553
TOTAL	43,303,113	127,752,591	6,711,501	18,809,828	258,754,190	2,792,830,437	8,164,872	10,273,686	241,521,416	3,508,121,634

TABLE B-22: TOTAL TRANSPORTATION<sup>(a)</sup> AND

(in dollars)

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Calendar Year	SOUTHERN CALIFORNIA AREA									
	Antelope Valley East Kern Water Agency	Castaic Lake Water Agency	Coachella Valley County Water District	Crestline Lake Arrowhead Water Agency	Desert Water Agency	Littlerock Creek Irrigation District	Mojave Water Agency	Palmdale Water District	San Bernardino Valley Municipal Water District	San Gabriel Valley Municipal Water District
	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)
1962	0	0	0	0	0	0	0	0	0	0
1963	33,321	0	0	0	0	0	0	0	51,594	0
1964	62,440	19,870	14,165	4,285	36,701	1,131	27,936	8,124	81,329	34,561
1965	118,063	37,912	24,816	7,105	40,332	2,068	49,779	15,128	133,526	34,954
1966	214,819	71,840	44,385	12,374	72,605	3,733	89,719	27,534	230,698	61,000
1967	415,991	148,049	85,691	23,349	140,727	7,256	174,317	53,819	431,229	115,016
1968	730,113	310,319	151,333	41,142	248,981	12,763	307,928	94,680	776,011	207,277
1969	1,048,715	467,305	223,145	60,596	367,417	18,518	453,806	136,745	1,190,613	317,751
1970	1,365,068	595,681	312,850	89,024	515,359	25,031	627,147	183,321	1,758,858	462,430
1971	1,691,978	749,578	429,787	127,584	708,219	31,623	850,285	229,664	2,513,415	652,814
1972	2,443,908	941,638	598,441	178,351	981,732	43,019	1,166,552	285,184	3,703,583	940,043
1973	2,313,713	996,850	737,541	189,294	1,201,367	45,425	1,261,649	310,544	3,940,406	950,645
1974	2,434,463	1,069,445	764,113	202,473	1,245,991	48,386	1,320,314	329,067	4,410,963	1,094,098
1975	2,647,733	1,141,432	810,697	217,624	1,323,115	52,697	1,402,913	352,353	4,582,169	1,194,340
1976	3,136,613	1,203,572	844,591	230,439	1,379,782	56,841	1,486,676	382,247	5,240,701	1,309,229
1977	3,443,264	1,212,859	891,227	240,816	1,446,635	60,012	1,527,239	394,861	5,388,176	1,337,187
1978	3,733,467	1,261,036	944,591	256,158	1,522,691	66,468	1,566,670	412,002	5,597,293	1,383,492
1979	3,871,879	1,316,095	964,137	265,918	1,546,391	69,252	1,859,122	427,087	5,619,909	1,411,993
1980	4,081,955	1,391,481	999,280	273,390	1,620,818	72,918	2,133,738	445,341	5,729,481	1,456,472
1981	4,324,331	1,441,252	1,057,165	288,845	1,714,875	77,555	2,251,408	464,731	5,977,988	1,533,047
1982	4,501,296	1,499,211	1,101,404	306,414	1,787,293	80,553	2,339,563	498,310	6,057,067	1,552,890
1983	8,235,455	1,909,726	2,385,754	650,757	3,824,408	181,426	5,192,106	817,476	10,872,131	2,677,923
1984	9,525,433	2,121,322	2,664,685	728,794	4,274,668	203,383	5,827,141	999,659	11,990,599	2,894,408
1985	10,694,840	2,291,976	2,801,008	746,554	4,497,790	216,994	6,187,532	1,124,762	12,326,634	2,937,965
1986	11,686,935	2,416,479	2,959,727	799,427	4,758,203	230,880	6,467,977	1,264,849	12,983,367	3,042,249
1987	11,988,501	2,494,309	3,085,216	816,044	5,023,001	241,698	6,727,204	1,387,067	12,936,812	2,998,230
1988	12,917,288	2,815,022	3,344,099	886,537	5,507,194	263,752	7,237,416	1,583,496	14,061,761	3,215,182
1989	13,489,338	3,040,814	3,549,481	921,374	5,907,274	281,273	7,700,679	1,743,663	14,429,635	3,255,307
1990	13,933,186	3,095,458	3,728,646	989,323	6,149,151	294,577	7,986,965	1,888,615	15,483,526	3,417,549
1991	14,345,063	3,225,249	3,711,305	963,319	6,120,539	293,241	7,997,904	2,039,905	15,062,114	3,335,861
1992	15,363,520	3,457,074	3,819,112	1,000,893	6,298,359	305,228	8,211,135	2,280,497	15,854,292	3,544,537
1993	15,777,706	3,535,759	3,832,565	992,795	6,320,539	306,403	8,266,661	2,289,323	15,572,713	3,512,183
1994	16,208,998	3,583,118	3,846,040	1,008,130	6,342,772	307,815	8,269,200	2,299,930	15,836,610	3,585,909
1995	16,568,460	3,672,054	3,842,273	1,011,752	6,336,559	307,730	8,250,552	2,299,275	15,901,373	3,620,732
1996	17,672,124	3,912,470	3,950,930	1,030,860	6,515,763	319,452	8,507,853	2,387,353	16,423,883	3,770,538
1997	17,554,989	3,855,453	3,837,497	1,005,553	6,328,682	308,149	8,251,569	2,302,511	15,738,965	3,652,686
1998	18,213,938	3,906,419	3,854,477	1,001,600	6,356,689	312,030	8,307,449	2,331,670	15,697,027	3,667,685
1999	18,980,095	4,034,785	3,934,676	1,024,651	6,488,960	317,606	8,476,962	2,373,518	16,089,517	3,771,080
2000	19,380,165	4,153,462	3,930,041	1,029,549	6,481,322	316,439	8,452,956	2,364,720	16,178,054	3,810,389
2001	19,367,265	4,065,089	3,857,206	1,012,285	6,361,189	310,960	8,290,679	2,323,595	15,808,198	3,754,401
2002	19,663,628	4,261,410	3,913,952	1,009,387	6,454,775	315,898	8,454,101	2,360,660	15,791,267	3,782,633
2003	19,840,200	4,371,946	3,939,150	1,028,146	6,496,340	318,859	8,481,288	2,382,906	16,271,396	3,905,465
2004	19,804,667	4,405,868	3,929,805	1,025,173	6,480,929	318,245	8,462,186	2,378,276	16,002,111	3,870,520
2005	19,810,017	4,521,590	3,934,597	1,026,419	6,488,827	318,351	8,472,610	2,379,086	16,170,511	3,932,331
2006	19,749,980	4,591,111	3,929,364	1,031,860	6,480,198	317,341	8,445,824	2,371,486	16,099,132	3,937,160
2007	19,506,932	4,536,012	3,868,981	1,007,055	6,380,601	313,316	8,335,049	2,341,267	15,668,303	3,870,601
2008	19,783,140	4,690,893	3,932,071	1,029,602	6,484,661	317,895	8,458,407	2,375,664	16,086,255	3,987,693
2009	19,591,760	4,791,040	3,872,139	1,004,656	6,385,812	314,706	8,349,234	2,351,709	15,652,103	3,919,481
2010	19,715,063	4,869,346	3,923,310	1,028,101	6,470,216	316,688	8,437,594	2,366,593	16,045,931	4,028,538
2011	20,017,860	4,951,889	3,962,096	1,032,134	6,534,189	321,830	8,535,665	2,405,210	16,035,859	4,057,817
2012	19,678,096	4,825,625	3,889,338	1,015,677	6,414,182	316,147	8,371,789	2,362,538	15,731,221	4,006,482
2013	19,878,440	4,955,526	3,939,823	1,028,450	6,484,110	319,989	8,482,406	2,391,401	15,896,703	4,072,236
2014	19,848,861	4,912,176	3,928,475	1,024,948	6,479,329	318,876	8,460,506	2,383,397	15,853,516	4,086,333
2015	19,712,920	4,968,538	3,906,367	1,018,767	6,442,368	316,608	8,414,615	2,366,397	15,721,928	4,078,072
2016	19,723,024	4,887,278	3,907,380	1,017,819	6,444,539	316,732	8,421,793	2,367,422	15,700,300	4,106,350
2017	19,574,135	4,848,284	3,876,221	1,010,563	6,393,158	314,091	8,356,817	2,347,767	15,652,716	4,124,617
2018	19,272,903	4,682,686	3,813,993	993,934	6,290,526	308,780	8,228,797	2,308,371	15,233,305	4,046,933
2019	19,302,296	4,431,692	3,785,855	970,873	6,244,111	308,856	8,211,338	2,310,075	14,802,283	3,990,478
2020	18,760,684	4,405,328	3,670,558	950,396	6,053,972	298,584	7,948,876	2,235,269	14,561,875	4,006,571
2021	18,501,360	4,271,916	3,565,839	914,925	5,881,264	293,123	7,751,065	2,197,417	13,861,959	3,831,197
2022	18,367,526	4,182,059	3,510,493	897,480	5,789,986	290,618	7,643,174	2,179,421	13,445,203	3,729,498
2023	18,317,358	4,165,884	3,492,953	892,636	5,761,059	289,640	7,607,782	2,172,537	13,304,456	3,692,880
2024	18,299,191	4,125,726	3,484,839	888,413	5,747,676	289,318	7,595,635	2,170,175	13,214,079	3,672,179
2025	18,275,675	4,113,366	3,471,895	884,732	5,726,329	288,901	7,569,742	2,167,122	13,133,198	3,650,914
2026	18,263,061	4,103,641	3,462,094	882,050	5,710,165	288,658	7,549,913	2,165,448	13,055,215	3,630,167
2027	18,250,254	4,091,966	3,453,455	879,773	5,695,918	288,407	7,532,242	2,163,600	12,998,990	3,615,067
2028	18,240,675	4,072,593	3,449,388	878,721	5,682,912	288,238	7,523,883	2,162,351	12,978,662	3,609,551
2029	18,220,640	4,052,016	3,445,611	877,758	5,668,282	287,902	7,516,082	2,159,835	12,961,451	3,604,837
2030	18,194,975	3,985,594	3,440,875	876,554	5,675,171	287,473	7,506,283	2,156,614	12,940,028	3,598,964
2031	18,157,688	3,954,323	3,434,108	874,843	5,664,012	286,849	7,492,280	2,151,930	12,909,736	3,590,649
2032	18,112,745	3,941,300	3,426,712	872,972	5,651,815	286,166	7,476,986	2,146,807	12,876,628	3,581,563
2033	18,067,553	3,932,656	3,420,676	871,444	5,641,860	285,610	7,464,505	2,142,628	12,849,601	3,574,147
2034	17,993,959	3,925,166	3,416,035	870,269	5,634,205	285,181	7,454,904	2,139,413	12,828,812	3,568,442
2035	17,575,374	3,918,813	3,412,233	869,307	5,627,935	284,829	7,447,017	2,136,772	12,811,776	3,563,762
TOTAL	970,309,069	227,186,720	203,744,778	53,121,215	335,277,025	16,406,990	437,967,089	118,350,190	837,808,709	210,838,180

# DELTA WATER<sup>(b)</sup> CHARGE FOR EACH CONTRACTOR

(in dollars)

Sheet 4 of 4

Calendar Year	SOUTHERN CALIFORNIA AREA (continued)				FEATHER RIVER AREA				FUTURE CONTRACTOR	GRAND TOTAL
	San Geronio Pass Water Agency	The Metropolitan Water District of Southern California	Ventura County Flood Control District	Total	City of Yuba City	County of Butte	Plumas County FC & WCD	Total	South Bay	
	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
1962	0	0	0	0	0	0	0	0	0	55,535
1963	0	692,304	0	777,219	0	0	0	0	57,714	1,607,110
1964	21,471	1,264,231	9,294	1,585,538	0	0	0	0	95,432	2,745,035
1965	21,624	2,183,808	17,676	2,686,791	0	0	395	395	164,842	4,700,102
1966	37,677	3,899,826	33,297	4,799,507	0	0	551	551	190,714	7,230,520
1967	70,939	7,691,302	68,005	9,425,690	0	0	549	549	247,682	12,771,853
1968	127,900	15,284,721	142,343	18,435,511	0	1,050	1,426	2,476	320,671	24,870,984
1969	196,272	23,061,143	214,414	27,756,440	0	1,225	4,045	5,270	387,962	35,893,535
1970	286,430	30,506,030	272,433	36,999,662	0	3,848	16,763	20,611	424,351	47,278,383
1971	405,213	39,883,186	341,328	48,614,674	0	4,546	18,819	23,365	414,319	60,353,486
1972	530,802	54,666,508	420,094	66,619,855	0	4,929	20,746	25,675	439,887	82,099,655
1973	581,443	59,373,960	433,292	72,336,129	0	7,059	21,374	28,433	413,863	87,147,455
1974	604,803	65,735,286	452,331	79,711,733	0	8,336	22,006	30,342	436,462	96,016,858
1975	637,106	71,641,902	475,667	86,479,748	0	12,358	23,103	35,461	474,121	104,946,418
1976	671,068	75,331,989	493,950	91,767,698	0	7,004	22,923	29,927	492,680	111,913,046
1977	755,882	78,451,892	492,177	95,562,227	0	16,917	22,969	39,886	509,128	126,992,561
1978	687,894	82,187,280	505,469	100,124,511	0	20,677	23,250	43,927	514,492	122,255,591
1979	695,869	83,421,949	523,722	101,993,323	0	24,436	23,531	47,967	514,309	125,821,360
1980	838,373	86,574,651	555,903	106,173,801	0	37,594	23,813	61,407	514,760	131,881,215
1981	883,709	90,000,689	581,377	110,596,972	75,958	51,221	24,095	151,274	516,370	140,420,238
1982	909,650	91,825,448	606,194	113,065,293	83,192	64,849	24,378	172,419	517,759	146,345,333
1983	1,566,704	139,056,667	771,582	178,142,115	91,331	78,477	24,661	194,469	530,581	229,982,113
1984	1,762,207	154,065,141	841,197	197,898,633	99,469	129,176	28,080	256,725	528,816	256,059,490
1985	1,861,049	159,960,745	920,151	206,568,000	107,607	161,470	28,476	297,553	529,364	269,446,057
1986	2,006,091	163,698,165	1,044,338	213,358,687	119,363	193,764	28,872	341,999	528,992	279,288,724
1987	2,051,192	164,181,345	1,138,287	215,068,906	132,023	226,058	29,268	387,349	528,877	285,577,502
1988	2,269,615	179,169,483	1,409,137	234,679,982	144,682	347,252	33,324	525,258	528,202	312,858,911
1989	2,386,396	190,384,905	1,676,975	248,767,114	159,150	405,409	33,998	598,557	527,704	328,456,991
1990	2,575,683	194,352,439	1,908,307	255,803,425	173,619	463,565	34,672	671,856	527,642	340,496,320
1991	2,505,532	195,895,529	1,941,682	257,437,243	173,619	463,565	35,346	672,530	527,583	342,568,118
1992	2,629,526	209,647,583	2,038,006	274,449,762	173,619	566,231	40,202	780,052	526,974	366,342,666
1993	2,592,519	212,402,629	2,091,272	277,493,067	173,619	566,231	41,026	780,876	526,764	369,589,708
1994	2,626,111	216,699,917	2,096,350	282,710,900	173,619	566,231	41,849	781,699	526,573	374,210,462
1995	2,632,865	222,378,952	2,116,340	288,938,917	173,619	566,231	42,879	782,729	526,742	382,240,211
1996	2,728,425	233,969,761	2,253,553	303,442,965	173,619	636,646	47,236	857,501	526,432	399,517,863
1997	2,610,039	227,097,463	2,167,574	294,711,130	173,619	636,646	48,394	858,659	526,755	392,461,227
1998	2,610,466	230,130,531	2,178,892	298,568,873	173,619	636,646	49,551	859,816	526,306	395,927,917
1999	2,673,983	236,536,150	2,245,008	306,946,991	173,619	636,646	50,709	860,974	526,719	404,096,159
2000	2,683,388	241,068,607	2,279,596	312,128,688	173,619	636,646	52,100	862,365	527,706	409,968,566
2001	2,620,085	234,074,312	2,191,237	304,036,501	173,619	636,646	53,489	863,754	527,425	402,296,778
2002	2,632,868	240,227,012	2,272,343	311,139,934	173,619	636,646	54,878	865,143	527,577	409,133,607
2003	2,702,488	245,472,968	2,290,887	317,502,038	173,619	636,646	56,267	866,532	527,636	415,894,821
2004	2,657,651	243,643,733	2,271,438	315,250,602	173,619	636,646	57,656	867,921	527,466	413,471,969
2005	2,686,004	247,358,203	2,294,055	319,392,601	173,619	636,646	59,045	869,310	527,790	417,534,409
2006	2,667,810	247,597,232	2,292,199	319,510,697	173,619	636,646	60,665	870,930	527,866	418,066,483
2007	2,603,958	242,572,692	2,230,984	313,235,751	173,619	636,646	62,286	872,551	527,575	411,700,515
2008	2,668,319	248,308,341	2,280,631	320,403,572	173,619	636,646	63,907	874,172	527,882	419,330,269
2009	2,604,143	248,607,581	2,291,621	319,735,985	173,619	636,646	65,527	875,792	527,310	417,543,145
2010	2,660,882	251,280,165	2,302,382	323,444,809	173,619	636,646	67,148	877,413	528,052	422,423,196
2011	2,664,390	256,889,310	2,339,934	329,748,183	173,619	636,646	69,000	879,265	527,644	428,898,649
2012	2,611,372	251,918,992	2,281,307	323,422,766	173,619	636,646	70,852	881,117	527,435	422,162,834
2013	2,639,749	257,669,534	2,342,678	330,101,045	173,619	636,646	72,935	883,200	482,609	429,126,009
2014	2,632,570	257,214,066	2,322,887	329,465,940	173,619	636,646	75,019	885,284	446,175	427,923,603
2015	2,610,979	259,466,557	2,344,746	331,369,362	173,619	636,646	76,939	887,204	391,719	428,821,511
2016	2,608,439	256,541,243	2,310,872	328,353,191	173,619	636,646	79,097	889,362	368,353	425,308,214
2017	2,599,892	254,772,106	2,292,092	326,162,459	173,619	636,646	79,100	889,365	327,916	422,819,185
2018	2,530,088	246,363,752	2,215,390	316,289,458	173,619	636,646	79,097	889,362	252,576	412,371,091
2019	2,472,245	236,057,590	2,120,994	305,080,686	173,619	636,646	76,532	886,797	189,636	401,836,289
2020	2,424,260	233,483,395	2,090,755	300,890,523	173,619	636,646	64,881	875,146	168,328	397,204,927
2021	2,314,690	225,145,577	2,031,731	290,562,063	173,619	636,646	64,073	874,338	164,395	386,830,921
2022	2,251,364	218,262,135	1,993,544	282,542,501	173,619	636,646	62,720	872,985	163,587	378,789,164
2023	2,228,572	215,971,362	1,990,119	279,887,238	173,619	636,646	62,720	872,985	162,891	376,095,496
2024	2,215,403	213,940,001	1,975,308	277,617,943	173,619	636,646	62,718	872,983	162,430	373,815,485
2025	2,202,200	212,965,787	1,970,713	276,420,574	173,619	636,646	62,716	872,981	160,685	372,596,233
2026	2,189,288	212,124,896	1,966,553	275,391,149	173,619	636,646	62,715	872,980	160,266	371,208,699
2027	2,179,928	211,313,727	1,961,260	274,424,587	173,619	636,646	62,715	872,980	159,566	370,195,729
2028	2,176,528	210,513,886	1,952,144	273,535,832	173,619	636,646	62,715	872,980	159,320	369,145,170
2029	2,173,631	208,997,538	1,932,654	271,892,917	173,619	636,646	62,715	872,980	159,013	367,251,936
2030	2,170,024	207,250,872	1,910,711	269,991,138	173,619	636,646	62,715	872,980	158,499	364,734,390
2031	2,164,918	205,987,721	1,896,085	268,565,142	173,619	636,646	62,715	872,980	157,781	361,165,659
2032	2,159,336	205,352,771	1,889,901	267,775,702	173,619	636,646	62,715	872,980	157,364	358,156,535
2033	2,154,780	204,904,851	1,885,736	267,196,047	173,619	636,646	62,715	872,980	157,118	357,101,971
2034	2,151,276	204,530,747	1,882,126	266,680,535	173,619	636,646	62,715	872,980	157,108	356,518,637
2035	2,148,404	204,216,503	1,879,065	265,891,790	173,619	636,646	62,715	872,980	157,108	355,690,520
TOTAL	136,834,450	12,655,371,275	112,254,295	16,315,469,985	8,999,249	30,465,549	3,271,796	42,736,594	28,502,351	21,464,979,327

TABLE B-23: EQUIVALENT UNIT CHARGE FOR WATER SUPPLY FOR EACH CONTRACTOR<sup>(a)</sup>(in dollars per acre-foot)<sup>(b)</sup>

Project Service Area and Water Supply Contractor	Transportation Charge				Delta Water Charge	Total Equivalent Unit Charge
	Capital Cost Component	Minimum OMP&R Component	Variable OMP&R Component	Total		
	(1)	(2)	(3)	(4)	(5)	(6)
FEATHER RIVER AREA						
City of Yuba City	0	0	0	0	18.09	18.09
County of Butte	0	0	0	0	20.43	20.43
Plumas County Flood Control and Water Conservation District	14.92	0.19	0	15.11	18.58	33.69
Feather River Area	0.82	0.01	0	0.83	19.73	20.56
NORTH BAY AREA						
Napa County Flood Control and Water Conservation District	49.11	9.38	20.84	79.33	26.37	105.70
Solano County Flood Control and Water Conservation District	19.26	2.71	5.28	27.25	20.27	47.52
North Bay Area	30.10	5.13	10.93	46.16	22.68	68.84
SOUTH BAY AREA						
Alameda County Flood Control and Water Conservation District, Zone 7	13.24	8.33	25.25	46.82	18.31	65.13
Alameda County Water District	12.38	6.46	22.19	41.03	15.25	56.28
Santa Clara Valley Water District	16.10	5.67	19.12	40.89	13.63	54.52
South Bay Area	14.86	6.28	20.77	41.91	14.74	56.65
SAN JOAQUIN VALLEY AREA						
County of Kings	3.53	1.26	8.93	13.72	16.48	30.20
Devil's Den Water District	7.86	5.45	12.99	26.30	13.51	39.81
Dudley Ridge Water District	4.27	1.53	7.95	13.75	14.69	28.44
Empire West Side Irrigation District	3.02	1.08	6.55	10.65	13.15	23.80
Hacienda Water District	4.46	1.60	8.20	14.26	14.99	29.25
Kern County Water Agency	7.58	3.07	12.64	23.29	16.65	39.94
Oak Flat Water District	1.53	0.66	4.87	7.06	13.79	20.85
Tulare Lake Basin Water Storage District	4.09	1.47	7.80	13.36	14.74	28.10
San Joaquin Valley Area	7.00	2.84	11.85	21.69	16.29	37.98
CENTRAL COASTAL AREA						
San Luis Obispo County Flood Control and Water Conservation District	107.23	18.78	71.65	197.66	28.43	226.09
Santa Barbara County Flood Control and Water Conservation District	93.03	15.26	72.28	180.57	21.16	201.73
Central Coastal Area	96.50	16.12	72.13	184.75	22.94	207.69
SOUTHERN CALIFORNIA AREA						
Antelope Valley-East Kern Water Agency	31.51	8.21	77.06	116.78	21.31	138.09
Castaic Lake Water Agency	59.66	15.52	54.20	129.38	28.64	158.02
Coachella Valley County Water District	34.94	12.91	91.97	139.82	18.08	157.90
Crestline-Lake Arrowhead Water Agency	44.48	16.43	97.48	158.39	19.18	177.57
Desert Water Agency	35.50	13.12	92.80	141.42	18.20	159.62
Littlerock Creek Irrigation District	24.06	7.70	75.64	107.40	17.98	125.38
Mojave Water Agency	34.90	12.90	101.07	148.87	20.30	169.17
Palmdale Water District	31.52	9.99	89.16	130.67	25.43	156.10
San Bernardino Valley Municipal Water District	45.83	16.34	67.14	129.31	17.96	147.27
San Gabriel Valley Municipal Water District	54.98	19.73	69.41	144.12	23.10	167.22
San Geronio Pass Water Agency	54.12	19.40	79.15	152.67	19.43	172.10
The Metropolitan Water District of Southern California	51.44	15.11	54.66	121.21	22.51	143.72
Ventura County Flood Control District	46.11	12.27	55.09	113.47	20.76	134.23
Southern California Area	49.12	14.71	59.43	123.26	22.07	145.33
ALL AREAS	30.45	9.31	37.46	77.22	19.33	96.55

a) Hypothetical charges which, if assessed on all water delivered to date plus all entitlement water estimated to be delivered during the remainder of the project repayment period, (Table B5-A) would produce a sum at the end of the period equivalent to those total charges required under a water supply contract, with interest at the project interest rate; 4.462 percent per annum. Includes surplus water delivered prior to May 1, 1973.

b) Metric conversion is dollars per acre-foot times 0.8107 equals dollars per cubic dekametre.

**TABLE B-24: EQUIVALENT UNIT COSTS OF WATER DELIVERED FROM OR  
THRU EACH AQUEDUCT REACH (a)**

(in dollars per acre-foot) (b)

Aqueduct Reach	Unit Costs of Reach (c)				Cumulative Unit Costs from the Delta			
	Capital Costs	Minimum OMP&R	Variable OMP&R	Total	Capital Costs	Minimum OMP&R	Variable OMP&R	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>NORTH BAY AQUEDUCT</b>								
1	14 44	2 34	4 85	21 63	14 44	2 34	4 85	21 63
2	6 00	.49	00	6 49	20 44	2 83	4 85	28 12
3	27 06	6 23	16 67	49 96	47 50	9 06	21 52	78 08
<b>SOUTH BAY AQUEDUCT</b>								
1	5 08	3 79	15 82	24 69	6 22	4 50	22 20	32 92
2	47	56	00	1 03	6 69	5 06	22 20	33 95
4	1 69	75	00	2 44	8 38	5 81	22 20	36 39
5	3 64	1 20	00	4 84	12 02	7 01	22 20	41 23
6	20	04	00	24	12 22	7 05	22 20	41 47
7	1 68	09	00	1 77	13 90	7 14	22 20	43 24
8	2 52	11	00	2 63	16 42	7 25	22 20	45 87
9	4 90	57	00	5 47	21 32	7 82	22 20	51 34
<b>CALIFORNIA AQUEDUCT</b>								
1	1 14	71	6 38	8 23	1 14	71	6 38	8 23
2A	90	15	00	1 05	2 04	86	6 38	9 28
2B	44	07	00	51	2 48	93	6 38	9 79
3	36	08	00	44	2 84	1 01	6 38	10 23
4	66	42	3 17	4 25	3 50	1 43	9 55	14 48
5	60	10	00	70	4 10	1 53	9 55	15 18
6	16	03	00	19	4 26	1 56	9 55	15 37
7	46	07	00	53	4 72	1 63	9 55	15 90
8C	01	02	00	03	4 73	1 65	9 55	15 93
8D	29	10	00	39	5 02	1 75	9 55	16 32
9	22	08	00	30	5 24	1 83	9 55	16 62
10A	24	09	00	33	5 48	1 92	9 55	16 95
11B	36	06	00	42	5 84	1 98	9 55	17 37
12D	34	07	00	41	6 18	2 05	9 55	17 78
12E	23	07	00	30	6 41	2 12	9 55	18 08
13B	51	13	00	64	6 92	2 25	9 55	18 72
14A	1 86	71	5 58	8 15	8 78	2 96	15 13	26 87
14B	29	11	00	40	9 07	3 07	15 13	27 27
14C	25	09	00	34	9 32	3 16	15 13	27 61
15A	1 32	65	6 00	7 97	10 64	3 81	21 13	35 58
16A	2 18	1 09	12 38	15 65	12 82	4 90	33 51	51 23
17E	7 72	1 93	43 44	53 09	20 54	6 83	76 95	104 32
17F	2 13	03	00	2 16	22 67	6 86	76 95	106 48
18A	1 07	20	-1 48	- 21	23 74	7 06	75 47	106 27
19	1 27	54	00	1 81	25 01	7 60	75 47	108 08
19C	14 28	59	00	14 87	39 29	8 19	75 47	122 95
20A	1 12	56	00	1 68	26 13	8 16	75 47	109 76
20B	1 54	48	00	2 02	27 67	8 64	75 47	111 78
21	77	31	00	1 08	28 44	8 95	75 47	112 86
22A	51	20	00	71	28 95	9 15	75 47	113 57
22B	6 24	3 38	16 10	25 72	35 19	12 53	91 57	139 29
23	33	10	00	43	35 52	12 63	91 57	139 72
24	4 10	1 50	00	5 60	39 62	14 13	91 57	145 32
25	2 07	03	00	2 10	41 69	14 16	91 57	147 42
26A	2 97	1 42	-20 92	-16 53	44 66	15 58	70 65	130 89
28G	4 25	48	00	4 73	48 91	16 06	70 65	135 62
28H	4 25	13	00	4 38	53 16	16 19	70 65	140 00
28J	12 05	4 75	00	16 80	65 21	20 94	70 65	156 80
<b>WEST BRANCH</b>								
29A	2 24	1 81	5 86	9 91	24 91	8 67	82 81	116 39
29F	1 49	41	00	1 90	26 40	9 08	82 81	118 29
29G	5 04	1 05	-18 15	-12 06	31 44	10 13	64 66	106 23
29H	3 43	98	00	4 41	34 87	11 11	64 66	110 64
29J	5 99	22	-20 53	-14 32	40 86	11 33	44 13	96 32
30	10 18	1 55	00	11 73	51 04	12 88	44 13	108 05
<b>COASTAL BRANCH</b>								
31A	5 15	5 19	7 04	17 38	10 17	6 94	16 59	33 70
33A	62 68	4 18	50 07	116 93	72 85	11 12	66 66	150 63
34	5 46	69	00	6 15	78 31	11 81	66 66	156 78
35	18 00	1 48	00	19 48	96 31	13 29	66 66	176 26

a) Representative of water transportation costs only; does not include conservation costs. The Delta Water Rate should be added to these values in order to approximate total water costs at canalside. Includes surplus water prior to May 1, 1973.

b) Metric conversion is dollars per acre-foot times 0.8107 equals dollars per cubic dekametre.

c) Hypothetical rates which, if assessed on all water delivered to date plus all entitlement water to be delivered during the remainder of the project repayment period, (Table B-5A) would total a sum at the end of the period equivalent to all Transportation Charges, together with interest at the project interest rate; 4.462 percent per annum.

TABLE B-25: ANNUAL SURPLUS WATER DELIVERIES

(in acre-feet)<sup>(a)</sup>

Area/Agency	Calendar Year		
	1973 <sup>(b)</sup>	1974	1975
SOUTH BAY AREA			
Santa Clara Valley Water District	2,499	2,934	18,470
Total	2,499	2,934	18,470
SAN JOAQUIN VALLEY AREA			
Devil's Den Water District	4,104	4,128	7,495
Dudley Ridge Water District	13,192	33,391	40,555
Empire West Side Irrigation District	2,814	1,539	3,448
Hacienda Water District	5,600	1,972	3,759
Kern County Water Agency	163,774	299,433	410,820
Oak Flat Water District	1,013	3,471	3,576
Tulare Lake Basin Water Storage District	63,988	68,989	132,206
Total	254,485	412,923	601,859
SOUTHERN CALIFORNIA AREA			
Littlerock Creek Irrigation District	80	67	356
Total	80	67	356
GRAND TOTAL	257,064	415,924	620,685

a) Metric conversion is acre-feet times 1.2335 equals cubic dekametres.

b) May through December only.



TABLE B-26: POWER COSTS FOR PUMPING SURPLUS WATER

(in dollars)

Area/Pumping Plant	Calendar Year					
	1973 <sup>(a)</sup>		1974		1975 <sup>(b)</sup>	
	Capacity	Energy	Capacity	Energy	Capacity	Energy
SOUTH BAY AQUEDUCT						
<u>Reach 1</u>						
South Bay & Del Valle Pumping Plants	5,290	6,302	21,773	7,561	39,001	47,597
CALIFORNIA AQUEDUCT						
<u>Reach 1</u>						
Delta Pumping Plant	0	231,691	0	374,506	340,456	617,395
<u>Reach 4</u>						
Dos Amigos Pumping Plant	37,033	102,725	81,328	181,827	174,415	263,999
<u>Reach 14A</u>						
Buena Vista Pumping Plant	25,622	53,375	69,381	95,596	146,404	99,745
<u>Reach 15A</u>						
Wheeler Ridge Pumping Plant	29,816	12,819	62,301	22,550	82,694	313
<u>Reach 16A</u>						
Wind Gap Pumping plant	0	1,697	0	5,599	23,378	661
<u>Reach 17E</u>						
A. D. Edmonston (Tehachapi) Pumping Plant	0	526	0	450	0	2,391
<u>Reach 31A</u>						
Las Perillas & Badger Hill Pumping Plants	15,588	24,245	31,511	33,406	41,828	49,503
TOTAL	113,349	433,380	266,294	721,495	848,176	1,081,604
COMBINED TOTAL	546,729		987,789		1,929,780	

a) May through December only.

b) Costs are being reviewed and are subject to revision.

**TABLE B-27: POWER, REPLACEMENT, AND ADMINISTRATIVE CHARGE  
FOR SURPLUS WATER DELIVERIES**  
(in dollars)

Area/Agency	Calendar Year		
	1973	1974	1975 <sup>a)</sup>
<b>SOUTH BAY AREA</b>			
Santa Clara Valley Water District			
Capacity	5,290	21,773	50,245
Energy	8,554	10,203	65,969
Replacement	-	-	1,216
Administrative	1,916	3,451	5,023
Total	15,760	35,427	122,453
<b>SAN JOAQUIN VALLEY AREA</b>			
Devil's Den Water District			
Capacity	2,722	3,308	10,168
Energy	8,712	9,105	17,011
Replacement	-	-	259
Administrative	1,573	1,187	2,038
Total	13,007	13,600	29,476
Dudley Ridge Water District			
Capacity	2,603	6,394	28,391
Energy	17,235	44,892	58,225
Replacement	-	-	1,052
Administrative	5,056	10,006	11,029
Total	24,894	61,292	98,697
Empire West Side Irrigation District			
Capacity	342	324	2,816
Energy	3,676	2,069	4,950
Replacement	-	-	89
Administrative	1,078	460	938
Total	5,096	2,853	8,793
Hacienda Water District			
Capacity	244	654	3,160
Energy	7,316	2,652	5,397
Replacement	-	-	97
Administrative	2,146	953	1,022
Total	9,706	4,259	9,676
Kern County Water Agency			
Capacity	90,152	216,862	634,405
Energy	302,474	555,925	732,538
Replacement	-	-	15,889
Administrative	62,767	95,360	111,724
Total	455,393	868,149	1,494,556
Oak Flat Water District			
Capacity	0	0	1,874
Energy	913	3,125	3,557
Replacement	-	-	58
Administrative	728	998	972
Total	1,641	4,123	6,461
Tulare Lake Basin Water Storage District			
Capacity	11,808	16,713	116,141
Energy	83,596	92,750	189,808
Replacement	-	-	3,428
Administrative	24,523	40,687	35,954
Total	119,927	150,150	345,331
<b>SOUTHERN CALIFORNIA AREA</b>			
Little Rock Creek Irrigation District			
Capacity	188	266	976
Energy	904	744	4,149
Replacement	-	-	138
Administrative	63	47	97
Total	1,155	1,057	5,360
<b>TOTAL, ALL CONTRACTORS</b>			
Capacity	113,349	266,294	848,176
Energy	433,380	721,495	1,081,604
Replacement	-	-	22,226
Administrative	99,850	154,000	168,797
Total	646,579	1,141,789	2,120,803

a) Power charges are being reviewed and are subject to revision.

TABLE B-28: PROJECTED ANNUAL SURPLUS WATER DELIVERIES

(in acre-feet)<sup>(a)</sup>

Area/Agency	Calendar Year					
	1976	1977	1978	1979	1980	1981
<b>SOUTH BAY AREA</b>						
Alameda County FC&WCD, Zone 7	0 <sup>(b)</sup>	0	0	0	0	0
Alameda County W.D.	9,390	16,574	15,674	14,874	13,723	12,774
Santa Clara Valley W.D.	12,000	12,000	12,000	12,000	12,000	12,000
Total	21,390	28,574	27,674	26,874	25,723	24,774
<b>SAN JOAQUIN VALLEY AREA</b>						
Devil's Den W.D.	3,300	2,900	3,300	3,600	3,800	3,800
Dudley Ridge W.D.	46,650	45,400	34,448	32,776	22,113	28,243
Empire West Side I.D.	3,000	3,000	3,000	2,842	1,806	2,154
Hacienda W.D.	3,900	4,200	4,600	4,644	3,131	4,083
Kern County W.A.	478,898	603,950	519,529	513,146	356,092	472,108
Oak Flat W.D.	2,200	2,000	1,800	1,700	1,500	1,400
Tulare Lake Basin WSD	178,300	174,300	67,380	59,291	40,064	51,261
Total	716,248	835,750	634,057	617,999	428,506	563,049
<b>SOUTHERN CALIFORNIA AREA</b>						
Antelope Valley-East Kern W.A.	0	53,130	51,580	48,210	43,275	38,430
Littlerock Creek I.D.	165	165	165	165	165	165
Total	165	53,295	51,745	48,375	43,440	38,595
<b>GRAND TOTAL</b>	<b>737,803</b>	<b>917,619</b>	<b>713,476</b>	<b>693,248</b>	<b>497,669</b>	<b>626,418</b>

a) Metric conversion is acre-feet times 1.2335 equals cubic dekametres.

b) Alameda County Flood Control and Water Conservation District, Zone 7, requested delivery of 5,017 acre-feet of surplus water in 1976. This request was received too late to be considered in the 1976 cost and charge estimates shown in Tables B-29 and B-30.

TABLE B-29: PROJECTED POWER COSTS FOR PUMPING SURPLUS WATER<sup>(a)</sup>

(in dollars)

Area/Pumping Plant	Calendar Year					
	1976	1977	1978	1979	1980	1981
SOUTH BAY AQUEDUCT						
Reach 1 South Bay & Del Valle Pumping Plants	83,000	111,000	114,000	116,000	108,000	112,000
CALIFORNIA AQUEDUCT						
Reach 1 Delta Pumping Plant	1,284,000	1,522,000	1,536,000	1,663,000	1,085,000	1,378,000
Reach 4 Dos Amigos Pumping Plant	346,000	518,000	434,000	445,000	321,000	436,000
Reach 14A Buena Vista Pumping Plant	200,000	293,000	313,000	318,000	241,000	260,000
Reach 15A Wheeler Ridge Pumping Plant	9,000	66,000	90,000	106,000	86,000	86,000
Reach 16A Wind Gap Pumping Plant	9,000	167,000	153,000	180,000	151,000	270,000
Reach 17E A. D. Edmonston (Tehachapi) Pumping Plant	1,000	579,000	347,000	325,000	675,000	365,000
Reach 31A Las Perillas & Badger Hill Pumping Plants	68,000	69,000	54,000	52,000	40,000	47,000
TOTAL	2,000,000	3,325,000	3,041,000	3,205,000	2,707,000	2,954,000

a) Estimated costs for capacity and energy which would be incurred in delivering the annual amounts of surplus water shown in Table B-28.

TABLE B-30: PROJECTED UNIT POWER RATES FOR PUMPING SURPLUS WATER<sup>(a)</sup>  
(in dollars per acre-foot)<sup>(b)</sup>

Area/Pumping Plant	Calendar Year					
	1976	1977	1978	1979	1980	1981
<b>SOUTH BAY AQUEDUCT</b>						
<u>Reach 1</u>						
South Bay & Del Valle Pumping Plants						
Unit Rate	3.880	3.885	4.119	4.316	4.199	4.521
Cumulative Rate	5.620	5.544	6.272	6.715	6.379	6.721
<b>CALIFORNIA AQUEDUCT</b>						
<u>Reach 1</u>						
Delta Pumping Plant						
Unit Rate	1.740	1.659	2.153	2.399	2.180	2.200
Cumulative Rate	1.740	1.659	2.153	2.399	2.180	2.200
<u>Reach 4</u>						
Dos Amigos Pumping Plant						
Unit Rate	0.484	0.584	0.635	0.670	0.682	0.726
Cumulative Rate	2.224	2.243	2.788	3.069	2.862	2.926
<u>Reach 14A</u>						
Buena Vista Pumping Plant						
Unit Rate	1.170	1.295	1.532	1.581	1.598	1.495
Cumulative Rate	3.394	3.538	4.320	4.650	4.460	4.421
<u>Reach 15A</u>						
Wheeler Ridge Pumping Plant						
Unit Rate	0.904	1.023	1.444	1.769	1.657	1.706
Cumulative Rate	4.298	4.561	5.764	6.419	6.117	6.127
<u>Reach 16A</u>						
Wind Gap Pumping Plant						
Unit Rate	1.817	2.828	2.664	3.275	3.126	5.957
Cumulative Rate	6.115	7.389	8.428	9.694	9.243	12.084
<u>Reach 17E</u>						
A. D. Edmonston (Tehachapi) P.P.						
Unit Rate	6.061	10.864	6.706	6.718	15.539	9.457
Cumulative Rate	12.176	18.253	15.134	16.412	24.782	21.541
<u>Reach 31A</u>						
Las Perillas & Badger Hill Pumping Plants						
Unit Rate	1.251	1.275	1.269	1.380	1.571	1.466
Cumulative Rate	3.475	3.518	4.057	4.449	4.433	4.392

a) Rates are based on estimated costs of capacity and energy required to deliver the annual amounts of surplus water shown in Table B-28.

b) Metric conversion is dollars per acre-foot times 0.8107 equals dollars per cubic dekametre.

TABLE B-31: COMMITMENT FOR THE COST OF POWER FOR PUMPING SURPLUS WATER<sup>(a)</sup>

Contractor	Year of Obligation			
	1978	1979	1980	1981
Dudley Ridge Water District				
Surplus Water Requested (acre-feet)	43,300	23,100	39,100	37,000
Obligation incurred (dollars)	15,800	29,000	27,100	48,000
Hacienda Water District				
Surplus Water Requested (acre-feet)	4,600	4,900 <sup>(b)</sup>	5,200	5,600
Obligation incurred (dollars)	2,000	0	3,600	6,700
Kern County Water Agency				
Surplus Water Requested (acre-feet)	584,790	462,100	554,900	509,617
Obligation incurred (dollars)	278,200	873,000	655,500	802,500
Santa Clara Valley Water District				
Surplus Water Requested (acre-feet)	12,000	12,000	12,000	12,000
Obligation incurred (dollars)	13,300	10,800	22,800	65,000
Tulare Lake Basin Water Storage District				
Surplus Water Requested (acre-feet)	170,400	140,000	203,500	158,700
Obligation incurred (dollars)	30,800	173,000	141,200	98,000
Totals				
Surplus Water Requested (acre-feet)	815,090	642,100	814,700	722,917
Obligation incurred (dollars)	340,100	1,085,800	850,200	1,020,200

a) Metric conversion is acre-feet times 1.2335 equals cubic dekametres.

b) Power not ordered to pump this amount as the request was not made in time to allow the State to place an order resulting in a rate advantage.

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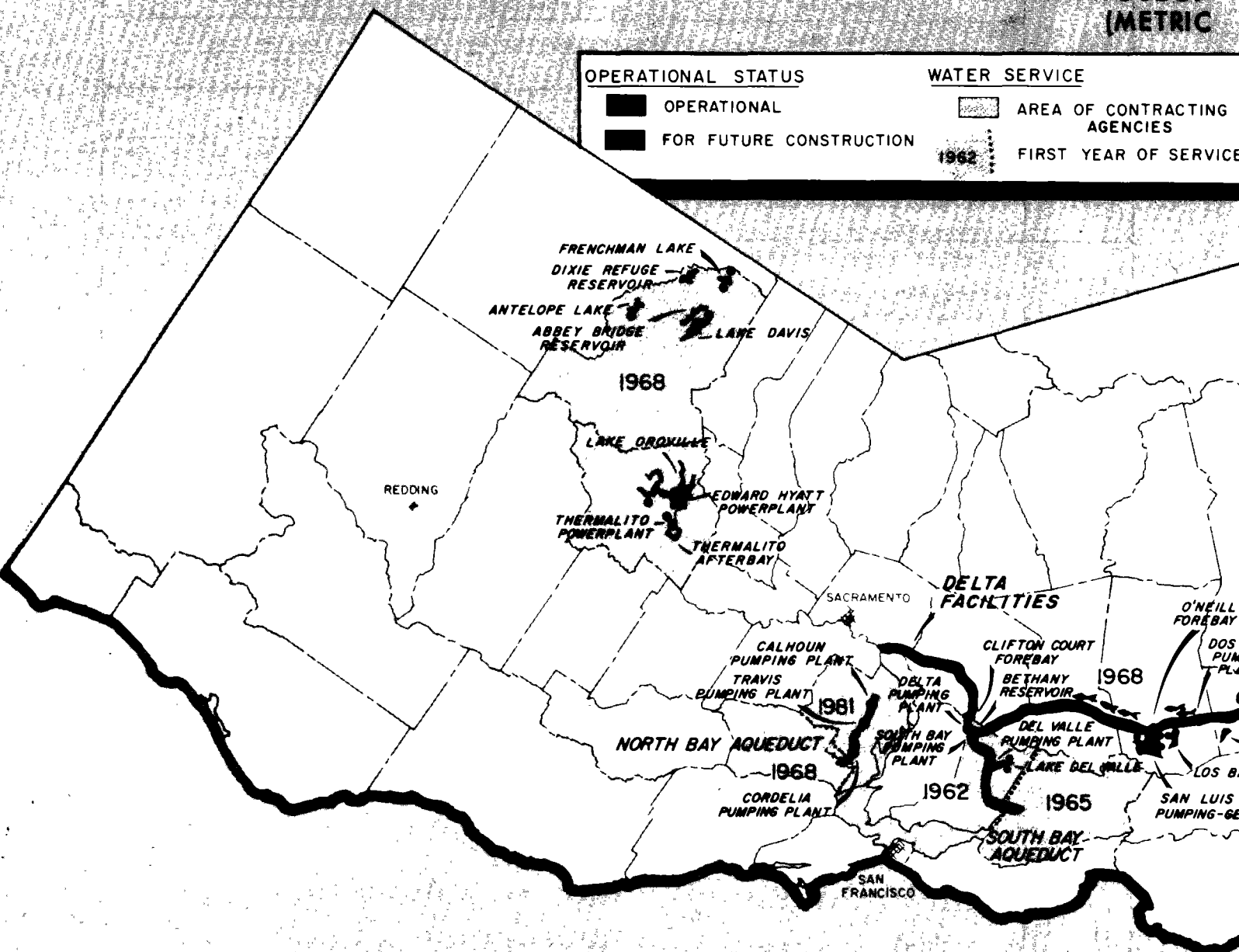
SUBJECT MATTER	BULLETIN 132-76														
	TABLE NO.	TABLE TITLE	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964	1963
MAIN TEXT (with allowance for future capital price escalation, for financial planning purposes)															
PROJECTED ANNUAL OPERATIONS	1	Annual Water Requirements	1	1	1	1	1	1	1	3	4	5	7	8	6,9
	4	Annual Project Energy Requirements for Pumping	4	3	3	3	3	3	3	4,5	6,7	6,7	8,9	9,10	10,11
ACTUAL OPERATIONS FOR PRIOR YEAR	2	Entitlement and Surplus Water	2	none	none	none	none	none	none	none	none	none	none	none	none
	3	Water Deliveries in 1975	3	2	2	2	2	2	none	none	none	none	none	none	none
	5	Water Quality Measurements at Selective Stations	5	4	4	none	none	none	none	none	none	none	none	none	none
	6	Monthly Power Operations in 1975	6	5	5	7	7	7	7	none	none	none	none	none	none
PROJECTED ANNUAL FINANCING OF CAPITAL AND OPERATING EXPENDITURES	7	Project Financial Analysis, December 31, 1975	7	6	6	8	14-16	13-15	14-16	21-24	23-26	23,24 26	24-27	24,25 27-31	40,42
	8	Project Construction Expenditures	8	7	7	9	9,11	8,10	8,11	10,13	19,15	19,15	20,16	22,17	12
	9	Bond Sales and Project Interest Rates	9	8	8	10	8	none	none	none	none	none	none	none	none
	10	Project Operating Costs	10	9	9	11	12,13	11,12	12,13	18,19	14,16	14,16	15,17	15,20 21	15
	11	Annual Service on Bonds Sold as of January 31, 1976	11	10	10	12,13	none	none	none	none	none	none	none	none	none
	12	Annual Service on Assumed Future Bond Sales	12	11	11	12,13	18	17	18	26	28	28	29	34	43
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	B-2	Factors for Distributing Reach Minimum OMP&R Costs Among Contractors	B-2	B-2	B-2	B-2	B-2	B-2	B-2	B-2	B-3	B-3	B-3	C-3	26-29
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	B-5A	Annual Water Quantities Delivered from Each Aqueduct Reach to Each Contractor	B-5	B-5	B-5	B-5	B-5	B-5	B-5	B-7	B-4	B-4	B-5	C-4	5
	B-5B	Annual Water Quantities Delivered to Each Contractor	B-5	none	none	none	none	none	none	none	none	none	none	none	none
	B-6	Annual Water Quantities Conveyed thru Each Pumping and Power Recovery Plant of Project Transportation Facilities	B-6	B-6	B-6	B-6	B-6	B-6	B-6	B-3	B-5	B-5	B-6	C-5	8
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	B-8	Capital Costs of Requested Delivery Structures to be Built by the State	B-8	B-8	B-8	B-8	B-8	B-8	B-8	B-9	none	none	none	none	none
	B-9	Capital Costs of Requested Excess Peaking Capacity	B-9	B-9	B-9	B-9	B-9	B-9	B-9	B-10	B-6	B-6	B-7	none	none
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	B-25	Annual Surplus Water Deliveries	none	none	none	none	none	none	none	none	none	none	none	none	none
	B-26	Power Costs for Pumping Surplus Water	none	none	none	none	none	none	none	none	none	none	none	none	none
	B-27	Power, Replacement and Administrative Charge for Surplus Water Deliveries	none	none	none	none	none	none	none	none	none	none	none	none	none
	B-28	Projected Annual Surplus Water Deliveries	none	none	none	none	none	none	none	none	none	none	none	none	none
	B-29	Projected Power Costs for Pumping Surplus Water	none	none	none	none	none	none	none	none	none	none	none	none	none
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## OPERATIONAL STATUS

- OPERATIONAL
- FOR FUTURE CONSTRUCTION

## WATER SERVICE

- AREA OF CONTRACTING AGENCIES
- 1962 FIRST YEAR OF SERVICE



## 25 DAMS AND RESERVOIRS

	Reservoirs			Dams			
	Capacity (millions of cubic metres)	Surface Area (hectares)	Shore-line (kilometres)	Crest Elevation <sup>1</sup> (metres)	Structural Height (metres)	Crest Length (metres)	Volume (cubic metres)
Frenchman Lake	68.43	639	33.8	1 709	42	219	410 600
Antelope Lake	27.84	377	24.1	1 532	37	402	290 500
Lake Davis	104.07	1 629	51.5	1 763	40	244	193 400
Abbey Bridge	55.51	789	33.8	1 669	36	351	382 300
Dixie Refuge	19.74	364	24.1	1 754	30	320	305 800
Lake Oroville	4 363.60	6 396	268.8	281	235	2 109	61 164 000
Thermalito Diversion Pool	16.44	131	16.1	71	44	396	117 700
Fish Barrier Pool	0.72	21	1.6	55	28	183	8 000
Thermalito Forebay	14.52	255	16.1	70	28	4 846	1 406 800
Thermalito Afterbay	70.36	1 741	41.8	43	12	12 802	3 838 000
Clifton Court Forebay	35.34	853	12.9	4	9	11 125	1 865 500
Bethany	5.93	65	9.7	76	37	1 201	1 070 300
Lake Del Valle	95.11	429	25.8	236	72	268	3 172 900
San Luis	2 514.82	5 140	104.6	169	117	5 669	59 363 500
O'Neill Forebay	69.60	1 093	19.3	71	27	4 374	2 293 700
Los Banos	42.63	252	19.3	117	51	418	1 605 600
Little Panoche	16.33	143	16.1	206	46	439	925 100
Buttes	26.89	235	9.7	850	58	680	2 393 000
Silverwood Lake	92.48	395	20.9	1 030	76	680	5 810 600
Lake Perris	162.15	938	16.1	488	39	3 536	15 291 000
Quail Lake	6.19	90	4.8	NA	12	—	—
Pyramid Lake	211.17	525	33.8	794	122	332	5 244 800
Elderberry Forebay	34.82	186	11.3	472	61	607	4 587 300
Castaic Lake	399.29	904	46.7	468	130	1 494	35 169 300
Castaic Lagoon	6.98	79	4.8	NA	8	—	—
Totals	8 460.96	23 669	867.5	—	—	52 695	206 909 700

1) Above sea level.

## AQUEDUCTS

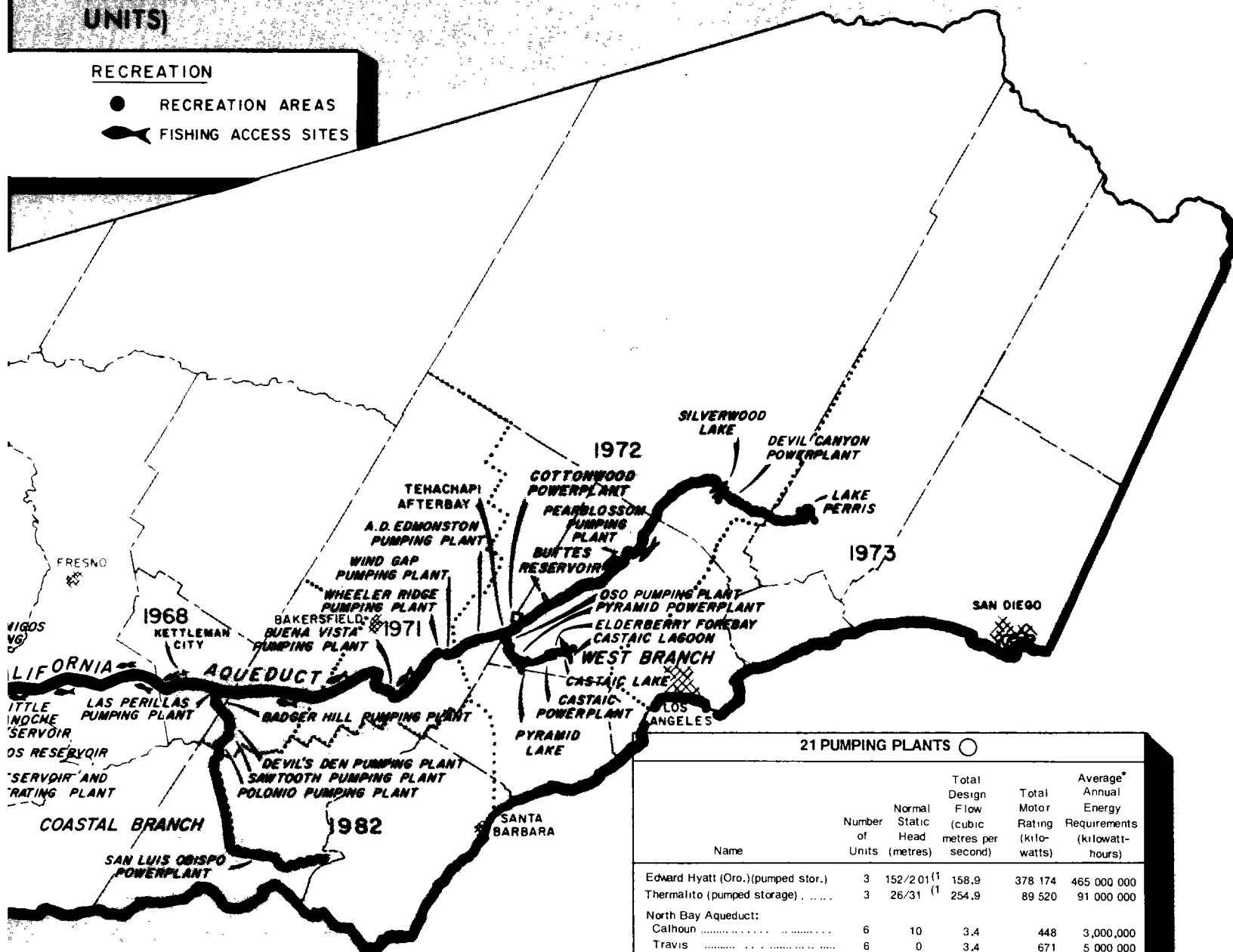
Name	Length (kilometres)				Channel and Reservoir
	Total	Canal	Pipeline	Tunnel	
North Bay Aqueduct	42.6	23.0	19.6	0	0
South Bay Aqueduct	69.1	13.5	53.0	2.6	0
Subtotal	111.7	36.5	72.6	2.6	0
California Aqueduct (main line):					
Delta to O'Neill Forebay	110.1	107.8	0	0	2.3
O'Neill Forebay to Kettleman City	170.1	166.6	0	0	3.5
Kettleman City to A.D. Edmonston Pumping Plant	194.6	194.6	0	0	0
A.D. Edmonston Pumping Plant thru Tehachapi Afterbay	17.0	0.3	4.0	12.7	0
Tehachapi Afterbay thru Lake Perris	222.7	150.3	61.6	6.1	4.7
Subtotal, main line	714.5	619.6	65.6	18.8	10.5
California Aqueduct (branches)					
Vest Branch	51.3	14.6	10.3	11.6	14.8
Coastal Branch	154.8	23.8	131.0	0	0
Subtotal, branches	206.1	38.4	141.3	11.6	14.8
Totals <sup>1)</sup>	1 032.3	694.5	279.5	33.0	25.3

1) Does not include Delta Facilities

# STATISTICS (UNITS)

## RECREATION

- RECREATION AREAS
- 🐟 FISHING ACCESS SITES



21 PUMPING PLANTS ○

Name	Number of Units	Normal Static Head (metres)	Total Design Flow (cubic metres per second)	Total Motor Rating (kilowatts)	Average* Annual Energy Requirements (kilowatt-hours)
Edward Hyatt (Oro.) (pumped stor.)	3	152/201 <sup>(1)</sup>	158.9	378 174	465 000 000
Thermalito (pumped storage)	3	26/31 <sup>(1)</sup>	254.9	89 520	91 000 000
North Bay Aqueduct:					
Calhoun	6	10	3.4	448	3,000,000
Travis	6	0	3.4	671	5 000 000
Cordelia	3	137	1.4	2 313	14 000 000
South Bay Aqueduct:					
South Bay	9	166	9.3	20 702	166 000 000
Del Valle	4	0/12 <sup>(2)</sup>	3.4	746	2 000 000
California Aqueduct (main line):					
Delta	11	74	291.8	248 418	1 355 000 000
San Luis					
Total	8	30/100 <sup>(2)</sup>	311.5	375 984	
State Share			163.2	196 944	313 000 000
Dos Amigos					
Total	6	34	373.8	179 040	
State Share			201.1	96 980	607 000 000
Buena Vista					
	10 <sup>(3)</sup>	62	143.0	101 456	746 000 000
Wheeler Ridge	9 <sup>(3)</sup>	71	130.2	104 440	797 000 000
Wind Gap	9 <sup>(3)</sup>	158	124.9	229 268	1 761 000 000
A. D. Edmonston (Tehachapi)	14 <sup>(3)</sup>	587	116.0	757 840	5 916 000 000
Pear Blossom	6	165	39.1	84 447	647 000 000
California Aqueduct (branches):					
Oso	8	70	88.6	69 975	446 000 000
Las Perillas	6	70	12.7	3 021	20 000 000
Badger Hill	6	46	12.7	7 833	56 000 000
Devil's Den	4	125	7.6	5 968	51 000 000
Sawtooth	4	101	3.6	4 849	41 000 000
Polonio	4	247	3.6	11 936	101 000 000
Total, State Share <sup>(4)</sup>					13 603 000 000

1) Minimum and maximum total pumping heads.

2) Minimum and maximum static heads.

3) Includes one spare unit.

4) Does not include Delta Facilities.

\* Under full development.

8 POWERPLANTS □

Name	Number of Units	Normal Static Head (metres)	Total Design Flow (cubic metres per second)	Power Generator Output (kilowatts)	Average* Annual Energy Output (kilowatt-hours)
Edward Hyatt (Oro.)	6	125/206 <sup>(1)</sup>	412.0	678 750	2 475 000 000
Thermalito	4	26/30 <sup>(1)</sup>	478.6	119 600	383 000 000
San Luis					
Total	8	30/100 <sup>(1)</sup>	371.6	424 000	
State Share			194.6	222 100	170 000 000
Cottonwood	1	43	46.4	15 000	115 000 000
Devil Canyon	2	432	34.0	119 700	1 003 000 000
Pyramid	2	226	87.8	157 000	1 001 000 000
Castaic					
Total	7	324	521.0	1 250 000	
State Share <sup>(2)</sup>			87.6	214 000	1 457 000 000
San Luis Obispo	1	223	3.1	5 900	41 000 000
Total, State Share					6 645 000 000

1) Minimum and maximum static heads.

2) The City of Los Angeles Department of Water and Power constructed and operates a 1,250,000-kilowatt Castaic Powerplant and will supply the Project with electrical power and energy equivalent to the generation from a 213,984-kilowatt powerplant the State originally planned to construct.

\* Under full development

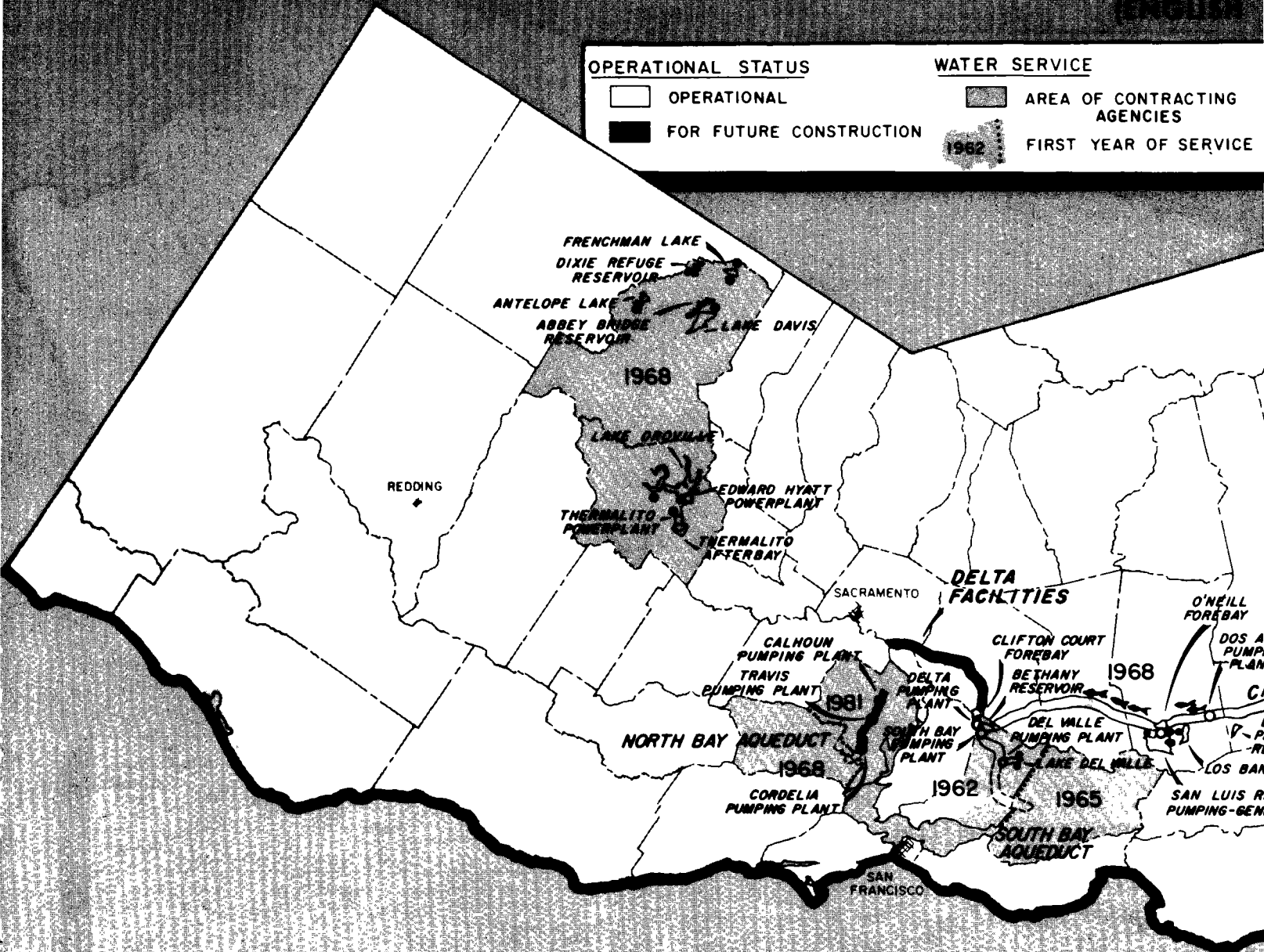


## OPERATIONAL STATUS

- OPERATIONAL
- FOR FUTURE CONSTRUCTION

## WATER SERVICE

- AREA OF CONTRACTING AGENCIES
- 1962 FIRST YEAR OF SERVICE



25 DAMS AND RESERVOIRS

Name of Reservoir	Reservoirs			Dams			
	Capacity (Acre-feet)	Surface Area (acres)	Shoreline (miles)	Crest Elevation (feet)	Structural Height (feet)	Crest Length (feet)	Volume (cubic yards)
Frenchman Lake	55,477	1,580	21	5,607	139	720	537,000
Antelope Lake	22,566	931	15	5,025	120	1,320	380,000
Lake Davis	84,371	4,026	32	5,785	132	800	253,000
Abbey Bridge	45,000	1,950	21	5,475	117	1,150	500,000
Dixie Refuge	16,000	900	15	5,754	100	1,050	400,000
Lake Oroville	3,537,577	15,805	167	922	770	6,920	80,000,000
Thermalito Diversion Pool	13,328	323	10	233	143	1,300	154,000
Fish Barrier Pool	580	52	1	181	91	600	10,500
Thermalito Forebay	11,768	630	10	231	91	15,900	1,840,000
Thermalito Afterbay	57,041	4,302	26	142	39	42,000	5,020,000
Clifton Court Forebay	28,653	2,109	8	14	30	36,500	2,440,000
Bethany	4,804	161	6	250	121	3,940	1,400,000
Lake Del Valle	77,106	1,060	16	773	235	880	4,150,000
San Luis	2,038,771	12,700	65	554	385	18,600	77,645,000
O'Neill Forebay	56,426	2,700	12	233	88	14,350	3,000,000
Los Banos	34,562	623	12	384	167	1,370	2,100,000
Little Pancho	13,236	354	10	676	152	1,440	1,210,000
Buttes	21,800	580	6	2,790	190	2,230	3,130,000
Silverwood Lake	74,970	976	13	3,378	249	2,230	7,600,000
Lake Perris	131,452	2,318	10	1,600	128	11,600	20,000,000
Quail Lake	5,020	223	3	NA	40	—	—
Pyramid Lake	171,196	1,297	21	2,606	400	1,090	6,860,000
Elderberry Forebay	28,231	460	7	1,550	200	1,990	6,000,000
Castaic Lake	323,702	2,235	29	1,535	425	4,900	46,000,000
Castaic Lagoon	5,662	196	3	NA	25	—	—
Totals	6,859,299	58,491	539			172,880	270,629,500

1) Above sea level.

AQUEDUCTS

Name	Length (miles)				Channel and Reservoir
	Total	Canal	Pipeline	Tunnel	
North Bay Aqueduct	26.5	14.3	12.2	0	0
South Bay Aqueduct	42.9	8.4	32.9	1.6	0
Subtotal	69.4	22.7	45.1	1.6	0
California Aqueduct (main line):					
Delta to O'Neill Forebay	68.4	67.0	0	0	1.4
O'Neill Forebay to Kettleman City	105.7	103.5	0	0	2.2
Kettleman City to A. D. Edmonston Pumping Plant	120.9	120.9	0	0	0
A. D. Edmonston Pumping Plant thru Tehachapi Afterbay	10.6	0.2	2.5	7.9	0
Tehachapi Afterbay thru Lake Perris	138.4	93.4	38.3	3.8	2.9
Subtotal, main line	444.0	385.0	40.8	11.7	6.5
California Aqueduct (branches):					
West Branch	31.9	9.1	6.4	7.2	9.2
Coastal Branch	96.2	14.8	81.4	0	0
Subtotal, branches	128.1	23.9	87.8	7.2	9.2
Totals <sup>1)</sup>	641.5	431.6	173.7	20.5	15.7

1) Does not include Delta Facilities

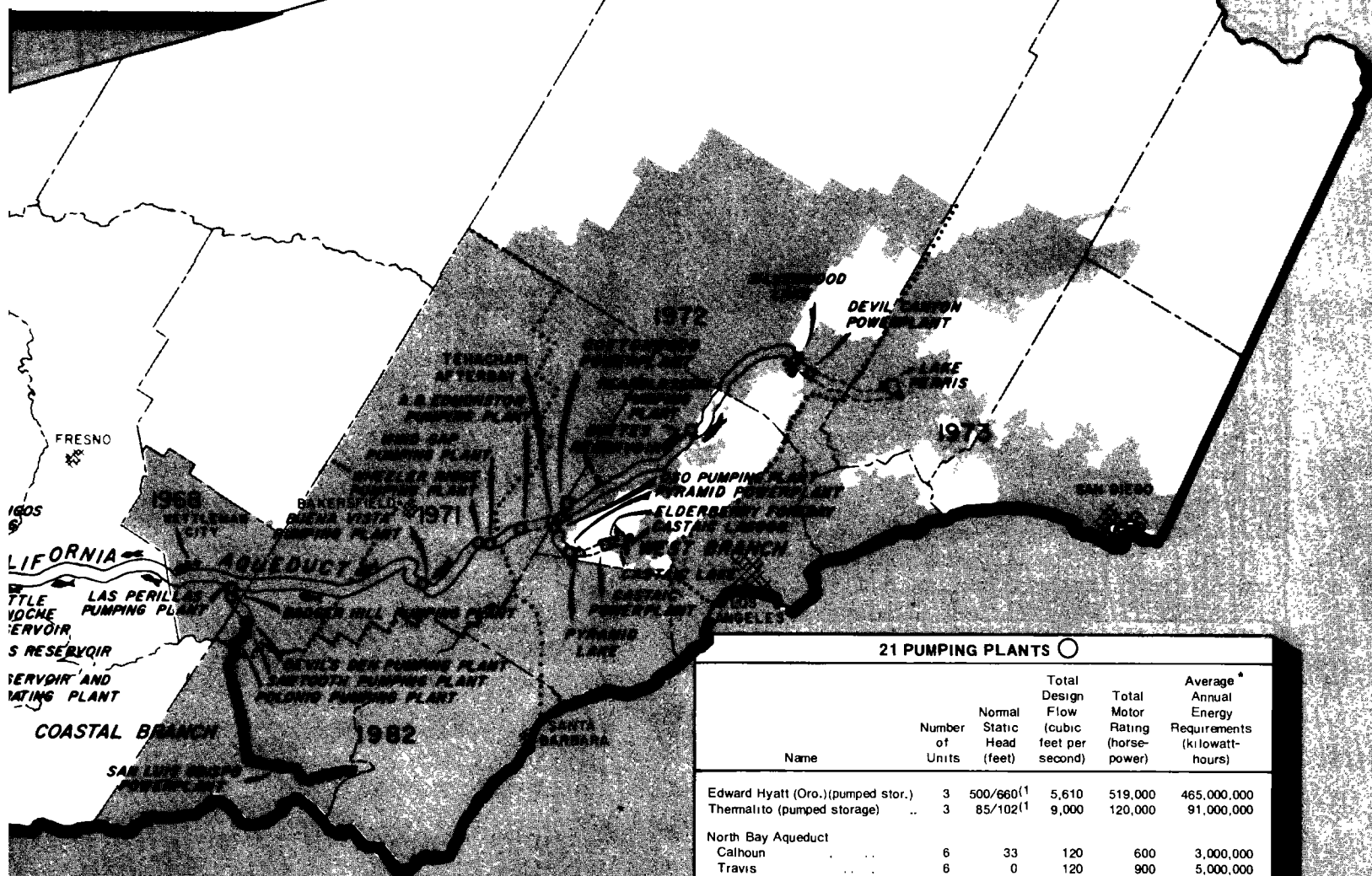


# STATISTICS UNITS

## RECREATION

RECREATION AREAS

FISHING ACCESS SITES



### 8 POWERPLANTS

Name	Number of Units	Normal Static Head (feet)	Total Design Flow (cubic feet per second)	Power Generator Output (kilowatts)	Average* Annual Energy Output (kilowatt-hours)
Edward Hyatt (Oroville)	6	410/676 <sup>(1)</sup>	14,550	678,750	2,475,000,000
Thermalito	4	85/100 <sup>(1)</sup>	16,900	119,600	383,000,000
San Luis	..	..	..	..	..
Total	8	99/327 <sup>(1)</sup>	13,120	424,000	..
State Share	..	..	6,872	222,100	170,000,000
Cottonwood	..	140	1,637	15,000	115,000,000
Devil Canyon	2	1,418	1,200	119,700	1,003,000,000
Pyramid	2	740	3,100	157,000	1,001,000,000
Castaic	..	..	..	..	..
Total	7	1,063	18,400	1,250,000	..
State Share <sup>(2)</sup>	..	..	3,092	214,000	1,457,000,000
San Luis Obispo	1	730	111	5,900	41,000,000
Total, State Share	..	..	..	..	6,645,000,000

1) Minimum and maximum static heads.

2) The City of Los Angeles Department of Water and Power constructed and operates a 1,250,000-kilowatt Castaic Powerplant and will supply the Project with electrical power and energy equivalent to the generation from a 213,984-kilowatt powerplant the State originally planned to construct.

\* Under full development

### 21 PUMPING PLANTS

Name	Number of Units	Normal Static Head (feet)	Total Design Flow (cubic feet per second)	Total Motor Rating (horsepower)	Average* Annual Energy Requirements (kilowatt-hours)
Edward Hyatt (Oro.) (pumped stor.)	3	500/660 <sup>(1)</sup>	5,610	519,000	465,000,000
Thermalito (pumped storage)	..	85/102 <sup>(1)</sup>	9,000	120,000	91,000,000
North Bay Aqueduct	..	..	..	..	..
Calhoun	6	33	120	600	3,000,000
Travis	6	0	120	900	5,000,000
Cordelia	3	448	48	3,100	14,000,000
South Bay Aqueduct:	..	..	..	..	..
South Bay	9	545	330	27,750	166,000,000
Del Valle	4	0/38 <sup>(2)</sup>	120	1,000	2,000,000
California Aqueduct (main line)	..	..	..	..	..
Delta	11	244	10,303	333,000	1,355,000,000
San Luis	..	..	..	..	..
Total	8	99/327 <sup>(2)</sup>	11,000	504,000	..
State Share	..	..	5,762	264,000	313,000,000
Dos Amigos	..	..	..	..	..
Total	6	113	13,200	240,000	..
State Share	..	..	7,100	130,000	607,000,000
Buena Vista	10 <sup>(3)</sup>	205	5,049	136,000	746,000,000
Wheeler Ridge	9 <sup>(3)</sup>	233	4,598	140,000	797,000,000
Wind Gap	9 <sup>(3)</sup>	518	4,410	308,000	1,761,000,000
A. D. Edmonston (Tehachapi)	14 <sup>(3)</sup>	1,926	4,095	1,040,000	5,916,000,000
Pearblossom	6	540	1,380	113,200	647,000,000
California Aqueduct (branches)	..	..	..	..	..
Oso	8	231	3,128	93,800	446,000,000
Las Perillas	6	55	450	4,050	20,000,000
Badger Hill	6	151	450	10,500	56,000,000
Devil's Den	4	409	126	8,000	51,000,000
Sawtooth	4	331	126	6,500	41,000,000
Polonio	4	810	126	16,000	101,000,000
Total, State Share <sup>(4)</sup>	..	..	..	..	13,603,000,000

1) Minimum and maximum total pumping heads.

2) Minimum and maximum static heads.

3) Includes one spare unit.

4) Does not include Delta Facilities

\* Under full development.